The Etiology of Fatal Child Maltreatment

Brett Drake, Ph.D.
Professor
Brown School of Social Work
Washington University in St. Louis
September 19th, 2014

Center for Violence and Injury Prevention

In order to understand what *causes something*, one must first understand *what that thing is*.

So what is fatal child maltreatment and *how does it differ* from nonfatal child maltreatment?

General Characteristics

First – this is not simple.

There is no simple "etiology" of fatal child abuse because fatal child abuse encompasses many different things (e.g. lack of supervision, battery) and is caused by many different things (e.g. stress, caretaker incapacity secondary to drug use).

Child maltreatment fatalities are usually attributed to biological parents.

Table 4–4 Child Fatalities by Perpetrator Relationship, 2012

	Child Fatalities	
Perpetrator	Number	Percent
PARENT		
Father	200	17.1
Father and Other	25	2.1
Mother	318	27.1
Mother and Other	147	12.5
Mother and Father	248	21.2
Total Parents	**938**	**80.0**
NONPARENT		
Child Daycare Provider	14	1.2
Foster Parent (Female Relative)		
Foster Parent (Male Relative)	1	0.1
Foster Parent (Nonrelative)	2	0.2
Foster Parent (Unknown Relationship)		
Friend or Neighbor	2	0.2
Group Home and Residential Facility Staff	1	0.1
Legal Guardian (Female)	1	0.1
Legal Guardian (Male)		
More than One Nonparental Perpetrator	27	2.3
Other	33	2.8
Other Professional		
Partner of Parent (Female)	1	0.1
Partner of Parent (Male)	30	2.6
Relative (Female)	33	2.8
Relative (Male)	23	2.0
Total Nonparents	**168**	**14.3**

This is the same as other forms of maltreatment.

CM 2012

Child Maltreatment fatalities are most commonly related to neglect.

Exhibit 4–D Maltreatment Types of Child Fatalities, 2012

Maltreatment Type	Child Fatalities	Reported Maltreatments	
		Number	Percent
Medical Neglect		117	8.9
Neglect		919	69.9
Other		329	25.0
Physical Abuse		582	44.3
Psychological Abuse		29	2.2
Sexual Abuse		10	0.8
Unknown			
Total	**1,315**	**1,986**	
Percent			**151.0**

This is the same as in nonfatal maltreatment. CM 2012

NCANDS does not find a particular caretaker risk factor to be present in the majority of cases.

Caregiver Risk Factor	Child Fatalities With a Caregiver Risk Factor	
	Number	Percent
Alcohol Abuse	44	6.3
Domestic Violence	220	20.1
Drug Abuse	130	17.3

This is the same as in nonfatal maltreatment. Estimates vary widely, some estimates are double the above figures (Sheldon-Sherman, 2013)

CM 2012, Exhibit 4E

Child maltreatment fatalities happen to very young kids.

Age	Percentage of all Fatalities (CM 2012)
>1	44%
1	15%
2	10%
3	7%
4	5%
5-17	17%

This is different from other forms of maltreatment, which often happen to considerably older kids

Child maltreatment fatalities are often multi-type.

Exhibit 4–D Maltreatment Types of Child Fatalities, 2012

Maltreatment Type	Child Fatalities	Reported Maltreatments	
		Number	Percent
Medical Neglect		117	8.9
Neglect		919	69.9
Other		329	25.0
Physical Abuse		582	44.3
Psychological Abuse		29	2.2
Sexual Abuse		10	0.8
Unknown			
Total	**1,315**	**1,986**	
Percent			**151.0**

This is the more common than in nonfatal maltreatment.

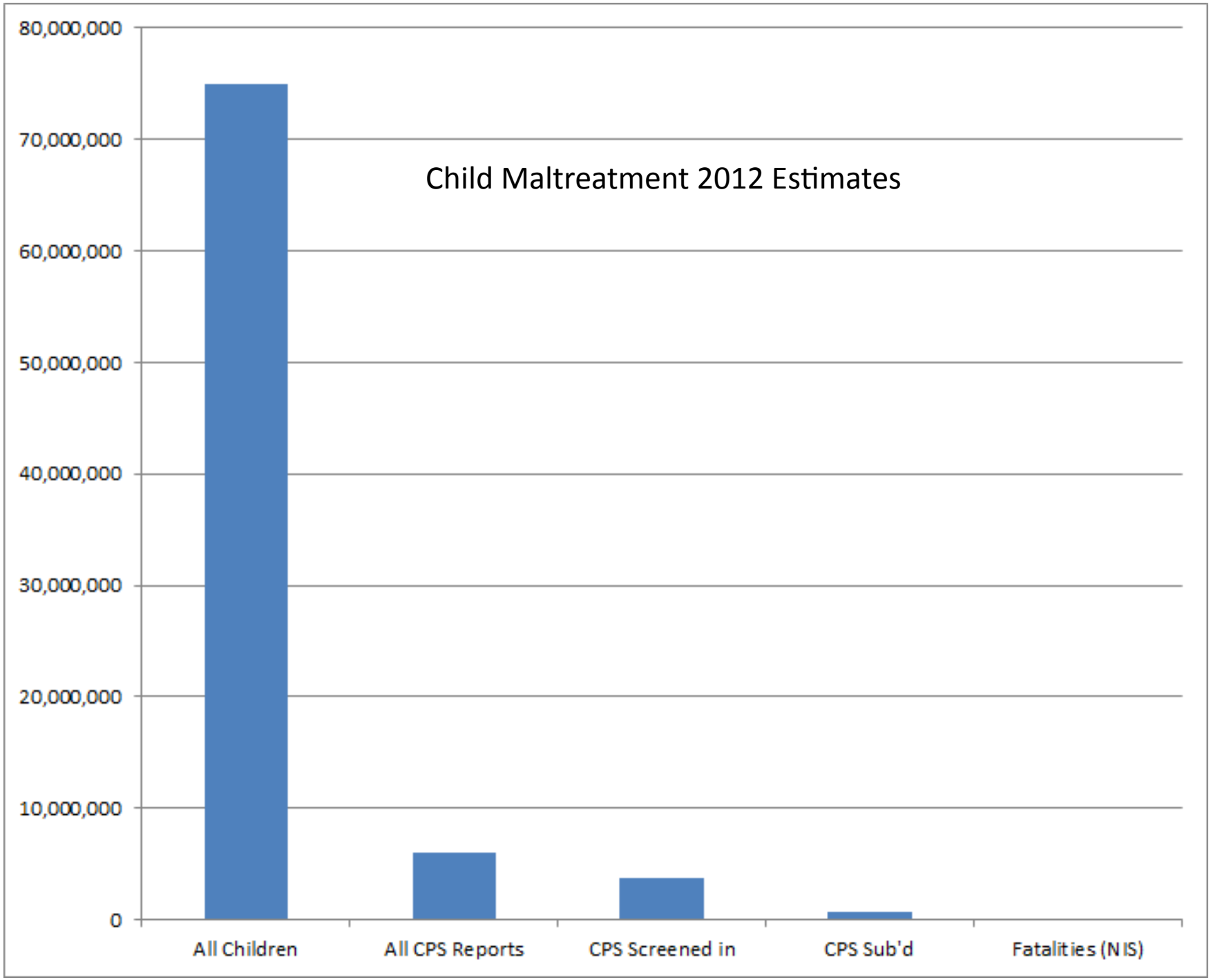
Fortunately, Fatal Child Maltreatment is Rare.

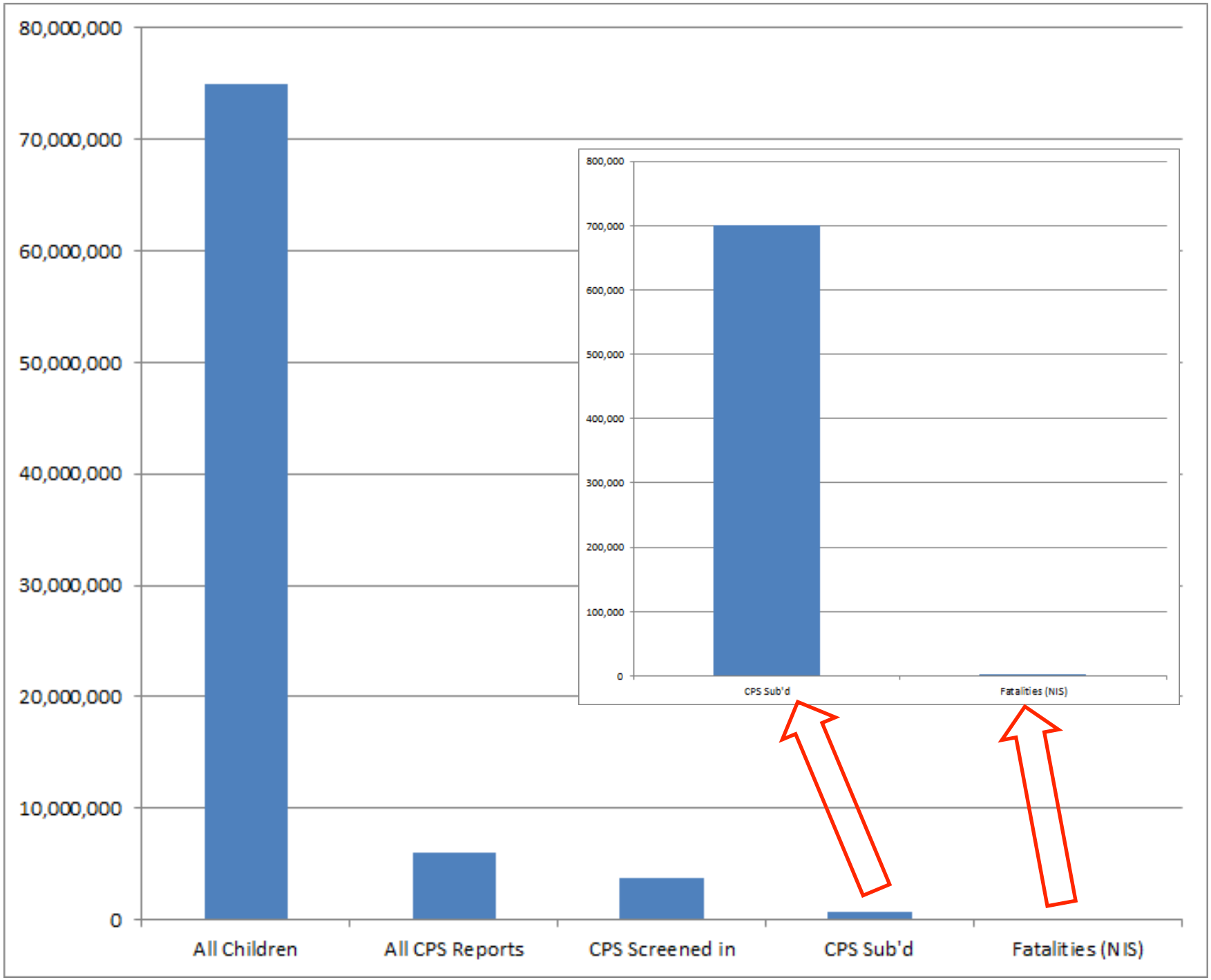
NCANDS Data from Child Maltreatment 2012:

Total Children:	75 Million
Total CPS Reports:	6 Million
Total Screened in Reports:	4 Million
Total Substantiated:	700,000
Maltreatment Fatalities	1,600

NIS Data (Estimates)

“Endangerment” standard:	3 Million
“Harm” standard:	1.25 Million
Fatally Maltreated:	2,400


Child Maltreatment 2012 Estimates
80,000,000
70,000,000
60,000,000
50,000,000
40,000,000
30,000,000
20,000,000
10,000,000
0
All Children
All CPS Reports
CPS Screened in
CPS Sub'd
Fatalities (NIS)


80,000,000
70,000,000
60,000,000
50,000,000
40,000,000
30,000,000
20,000,000
10,000,000
0
All Children
All CPS Reports
CPS Screened in
CPS Sub'd
Fatalities (NIS)
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
CPS Sub'd
Fatalities (NIS)

Summary

Fatalities are:

- Mostly or largely due to neglect.
- Mostly very young children (< 2 years old)
- *Very* rare. They are even very rare compared to the subset of children with substantiated (NCANDS) or "Harm Standard" (NIS) maltreatment. In other words, even if you gather together all children we know to be maltreated, you will still have to sift through a lot of kids to find those who will be/are actually fatally maltreated.

So if that’s what fatal child maltreatment looks like, what do we think causes it or is associated with it?

Theory

The most well known theories attempting to explain the etiology of maltreatment or fatal maltreatment have concerned themselves with the roles of psychological constructs (e.g. stress/ coping, social learning), dyadic issues (attachment) and environment (community cohesiveness or poverty) . We have yet to develop a well-specified theory that can explain large amounts of variability across the entire population.

Stith… 2009; Jonson-Reid… 2009, Sheldon-Sherman, 2013

Causal/Associated Factors

The *same* general factors seem to apply to (1)child abuse in general, (2)fatal child abuse in particular, and (3) to non-maltreatment child fatalities in general.

Child Issues:
Low Birth Weight, Small for Gestational Age, Behavioral issues, General Health issues, Specific difficulties (e.g. insoluble crying for physical abuse).

Familial Issues:
Low Parental Education, poor parental mental health, stress or attitudes (e.g. depression, authoritarianism, inappropriate expectations), family structure (no father, nonrelatives present), young parents, social isolation, crisis events, parental drug use, parental alcohol use, domestic violence, Prior maltreatment reports

Ecological Issues:
Poverty, Isolation, Community context

See Jonson-Reid… 2007; Putnam-Hornstein, 2011; Sheldon-Sherman 2013; Black…2001 for overview.

However, even if the risk factors are not different, Cases of fatal child maltreatment cases do seem to have more and, perhaps, more serious risk factors than nonfatal maltreatment or than fatal non-maltreatment cases.

CM 2012; Sheldon-Sherman, 2013; NIS-4 appendices.

Note: Some risk factors are specific to particular death mechanisms only.

For example, "insoluble crying" has received a lot of attention as a cause of physical abuse deaths, including AHT, but is probably not as important for neglect deaths.

Caretaker incapacity due to substance abuse is often noted in supervisory failure cases.

Which of these risk factors are most useful to us in prediction?

- It helps if we have the information. For example, if we have an address, we automatically know who lives in high poverty neighborhoods, but we don't have Beck Depression Inventories on everyone.
- The best predictors will apply to all major mechanisms of maltreatment
- A useful indicator will have high predictive power. We ideally want things that increase risk many-fold, not by 20% or even 50%.

Useful Indicator: Prior Reports

"Prior behavior is the best predictor of future behavior"

About a third of fatally maltreated children were previously known to CPS. One report tracking all deaths among previously maltreated children found that the average time between the reports was found to be about nine months in one study. It is clear, however, that the presence of prior reports (sub'd or unsub'd) is a very strong predictor of risk of fatal maltreatment – multiplying risk by as much as six times .

(Putnam-Hornstein, 2011; Sheldon-Sherman… 2013; Jonson-Reid… 2007)

Useful Indicator: Socioeconomic Status

NIS found families incomes below and above $15,000 per year differed by more than five times in maltreatment rates (3x for physical, 7x for neglect).

NIS does not report out fatalities due to small sample size, but looking at their appendices, one can see that the effect might be even greater for fatally maltreated children (14 times higher for people earning less than $15,000).

NIS-4 Full Report, Appendices, tables B-12 and C-12.

Useful Indicator: Non-CPS "Prior Reports"

Why must "prior reports" just be CPS reports?

We are continually told that many of these children "fell through the cracks" and are known to different agencies but nobody "put the pieces together". It would unquestionably increase our ability to understand/predict fatal child abuse if we were able to consider the broad range of system contacts for families (ER visits, Arrests, etc…). This would allow us to use the "multiproblem / more risk factors" finding which emerges consistently in the literature preventatively.

Suggestions for Prevention

(many of these suggestions are adapted from the work of others…)

Speed matters. Any useful system needs to get to very young kids with socially isolated parents.

Data are underused: Information from child welfare and other systems should be combined and accessed in real time. See "Birth Match" programs as one potential example. At a minimum, thought should be given to combining child protection, Emergency Room and other key datasets.

Getting voluntary services to young, multiple risk families is a good idea. Not only for the value such services may provide, but because they get "early eyes" on these families. Some states are experimenting with voluntary preventative programs to help provide non-coercive, non-incident based protection to children. Ideally, some clients will be identified through cross-sector administrative data systems which can identify high risk families (e.g. families with prior CPS reports and/or several ER visits, and/or and recent criminal history and/or recent severance of income maintenance…)

(See Sheldon-Sherman… 2013 for more comprehensive list of suggestions)

References

Child Maltreatment 2012 (2013), available at http://www.acf.hhs.gov/programs/cb/resource/child-maltreatment-2012

Douglas EM, Mohn BL. Fatal and non-fatal child maltreatment in the US: an analysis of child, caregiver, and service utilization with the National Child Abuse and Neglect Data Set. Child abuse & neglect 2014;38:42-51

Jonson–Reid, M., Chance, T., & Drake, B. (2007). Risk of death among children reported for nonfatal maltreatment. *Child Maltreatment, 12*(1), 86–95.

Jonson-Reid, M., Drake, B., Kohl, P. (2009). Is the overrepresentation of the poor in child welfare caseloads due to bias or need? *Children and Youth Services Review,* 31 422-427

National Vital Statistics Program . Mortality tables avialable online at http://www.cdc.gov/nchs/nvss/mortality/gmwki.htm

NIS-4 is available online at http://www.acf.hhs.gov/programs/opre/resource/fourth-national-incidence-study-of-child-abuse-and-neglect-nis-4-report-to

Putnam–Hornstein, E. (2011). Report of Maltreatment as a Risk Factor for Injury Death A Prospective Birth Cohort Study. *Child Maltreatment, 16*(3), 163–174.

Sheldon-Sherman J, Wilson D, Smith S. (2013). Extent and nature of child maltreatment-related fatalities: implications for policy and practice. Child Welfare 2013;92:41-58.*

Fatal Child Abuse Epidemiology in Comparison to other Child Maltreatment

Desmond K. Runyan, MD, DrPH

the Kempe Center and the University of Colorado School of Medicine

Kempe
40 YEARS

Epidemiology of Physical Abuse By Parental Self-Report

• Rate	260-430/100,000 children
• Peak age	9-12 years
• Child Gender	61% Female
• Oldest or Only child	unknown
• Peak Maternal age	20-25 years
• Marital status	unmarried
• Single parents	Higher risk
• Income	Little relationship in NC
	» Stronger in Colorado

Kempe 40 YEARS

[1] Theodore A, Chang JJ, Runyan, DK, et al. *Pediatrics* 2005: e331 - e337
Runyan D, et al Raising Colorado (Unpublished data)

Epidemiology of Reported Non-Fatal Physical Abuse

• Rate	3.2/100,000 children
• Peak age	Median 6.3 Yrs
• Gender	51% Female
• Oldest or Only child	31%
• Maternal age	20-25 years
• Marital status	unmarried
• Single parents	lower risk

Kempe 40 YEARS

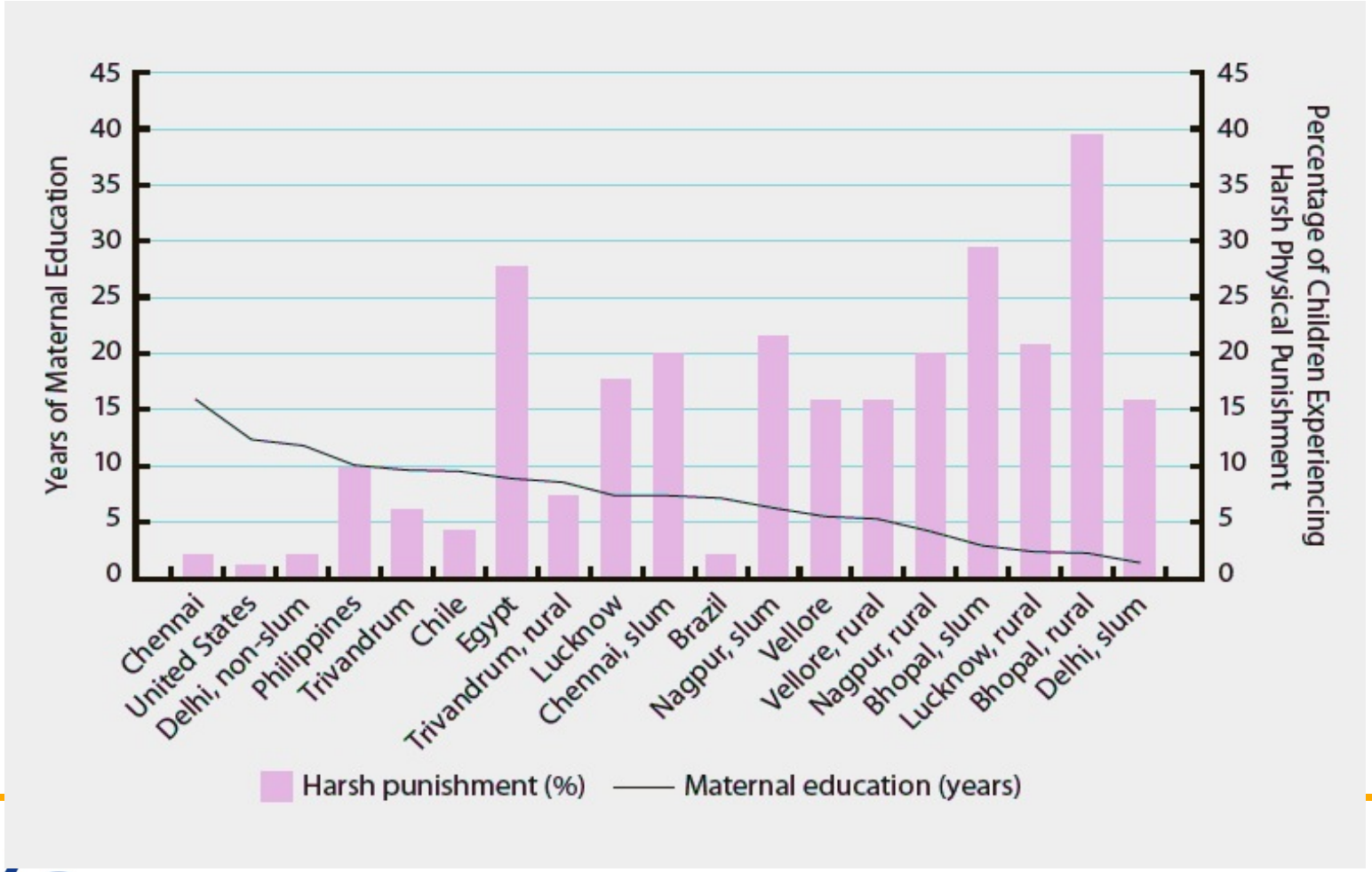
Douglas & Mohn. Child Abuse & Neglect 2014

Epidemiology of Fatal Child Physical Abuse

• Rate	2.08/100,000 abuse or neglect
• Peak age	57% below age 3
• Gender	40% Female
• Oldest or Only child	31%
• Maternal age	Mean 29 years
• Unmarried with partner	higher risk
• Single parents	lower risk

Douglas & Mohn. Child Abuse & Neglect 2014

Percent parental self-report of harsh punishment (abuse?)



Correlation (years of maternal education & % harsh punishment) = -0.734

Kempe 40 YEARS

Runyan et al. International Variation in Harsh Discipline Pediatrics 2011

Lessons from My "Shaken Baby" Work

- Overall rate of Abusive Head Trauma similar in civilian and military pops.
  - Enlisted men at 12 times higher risk than officers
  - Highest risk in dual military enlisted homes
  - Stress of deployment and stress from disasters both increase risk
- No change in rates of hospitalization seen with parent education programs

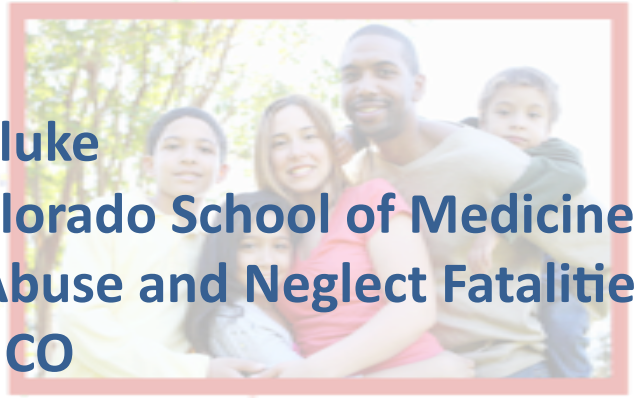
Kempe
40 YEARS

Observations

- As severity increases the proportion of girls is lower
- As severity increases so do % male perpetrators
- Male victims with male perpetrators likely reflects the gendered nature of discipline
- Public health model of Host-Agent- Environment interaction supported
- Global perspective: girls education and delayed childbearing is protective

Kempe
40 YEARS

Considerations Regarding Fatality Data and Etiology



John D. Fluke

Kempe Center, University of Colorado School of Medicine

Commission to Eliminate Child Abuse and Neglect Fatalities

Denver, CO

22nd September 2014

Kempe

School of Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

Content

- Questions of concern
- Current sources of national maltreatment fatality data
- Trends in child maltreatment related fatalities in the US
- International comparisons for maltreatment related fatalities
- Implications

Kempe

School of Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

Questions of concern

- In what ways are currently available national data on child maltreatment useful to inform our understanding of etiology?
- Can these data be translated into insights that are useful for policy and in what contexts?
- What are the limitations of the data?

Kempe

School of Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

Current Primary Sources of National Maltreatment Fatality Data and Some Limitations

- **National Child Abuse and Neglect Data System**
  - Case level data from CPS
  - Aggregate data from sources other than CPS
  - Limitations
    - Dependent on varied data collection and child protection policies (state and local), definitions, and systems
    - Limited to events defined as in scope for maltreatment
    - A range of maltreatment fatalities may not be counted
- **Centers for Disease Control**
  - Based on International Disease Codes (ICD) Connected with Death Registries (ICD 9 & ICD 10)
  - Maltreatment Related Violent Injury
  - Limitations
    - Does not include neglect
    - Broad sets of conditions that may or may not reflect maltreatment

Trends in Child Maltreatment Related Fatalities

Our current approaches to addressing maltreatment fatalities are not improving the situation for children

Kempe

School of Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

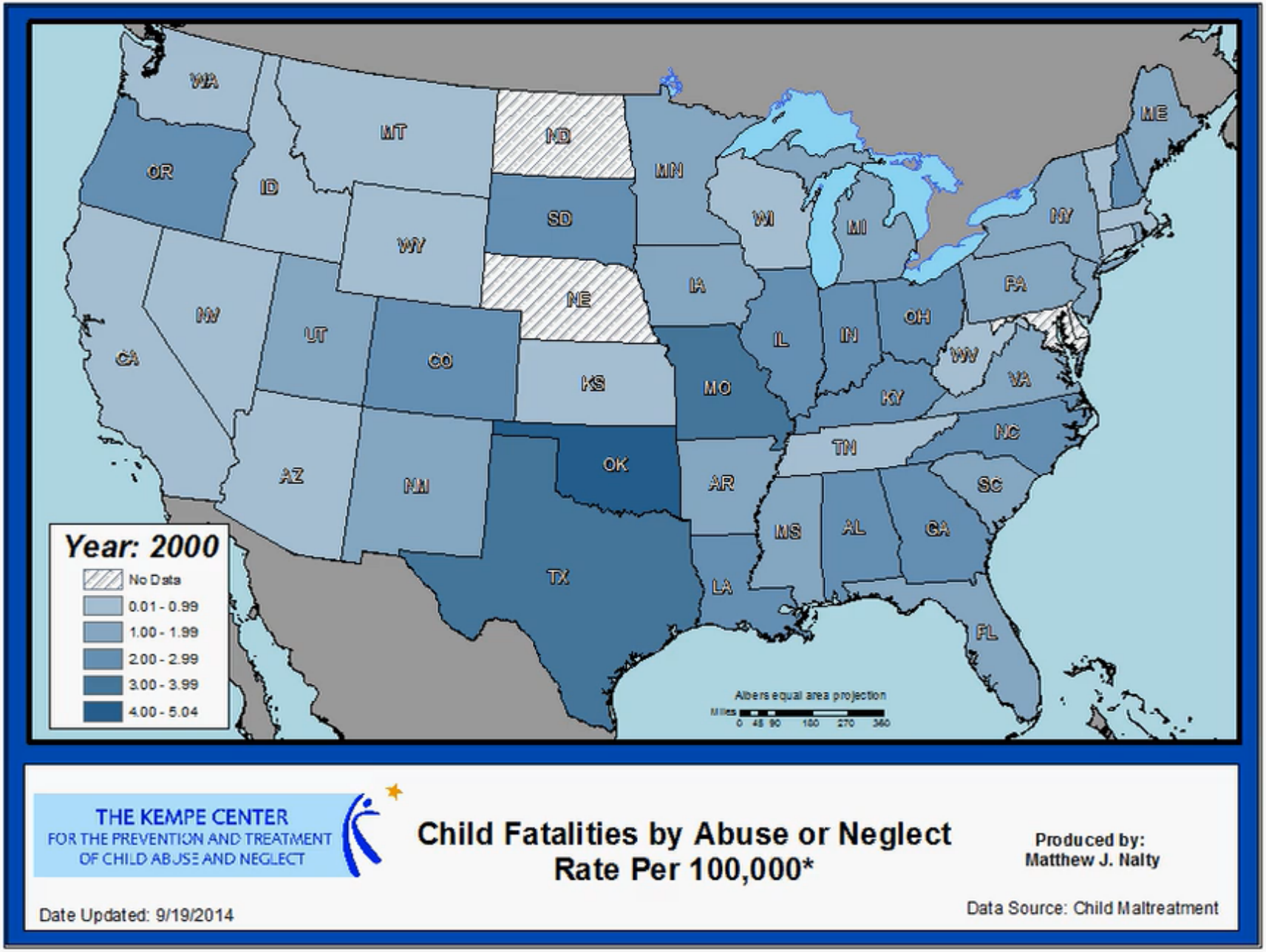
NCANDS Trends (2000-2012)

- Both Aggregate and Case Level Data
- State Level Data
- Trend Rates per 100 Thousand
- Trends in Deviation from Thirteen Year Average Rate

- Acknowledgement: Matthew Nalty, Kempe Center

Kempe

School of Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS



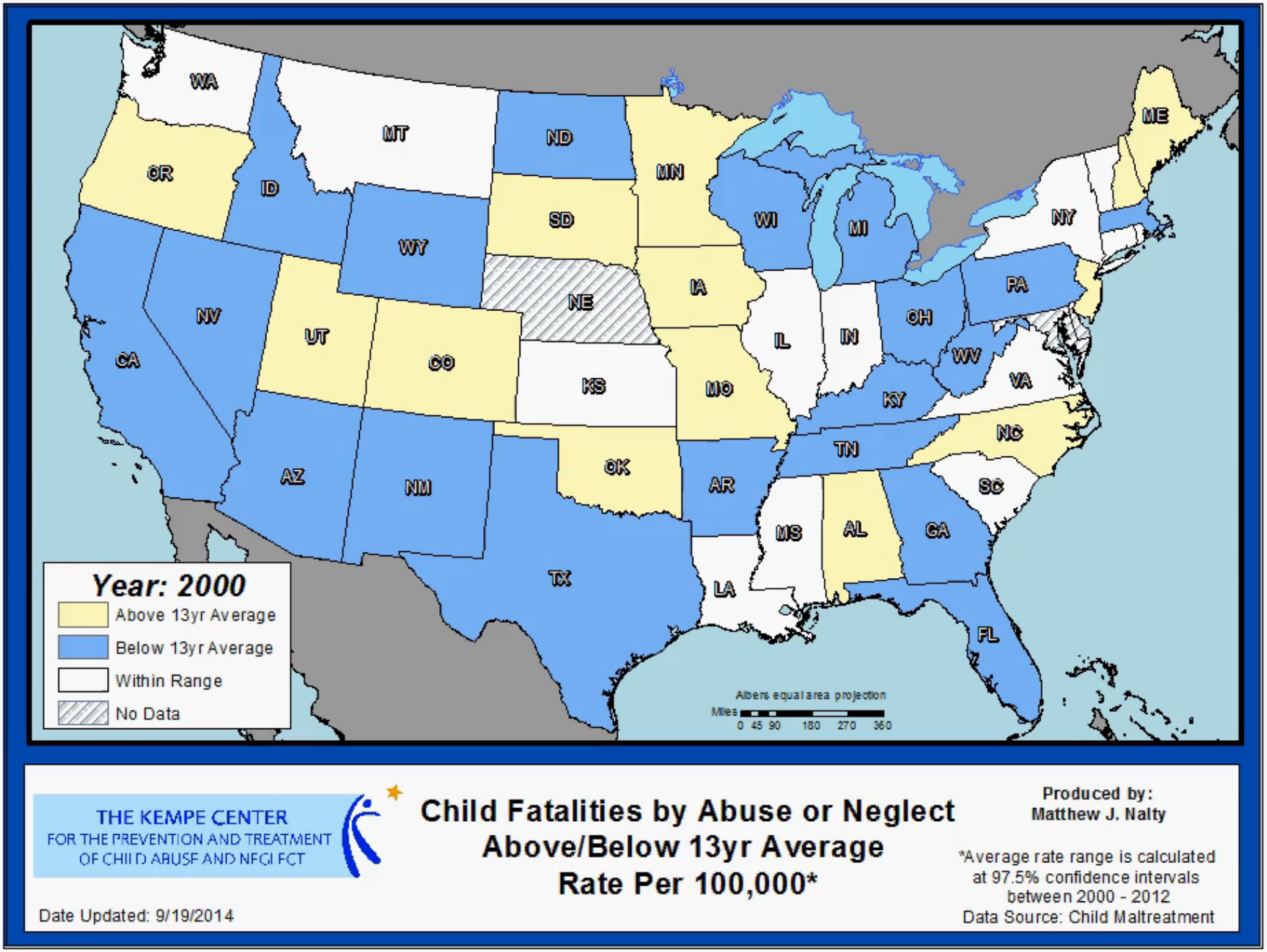
THE KEMPE CENTER
FOR THE PREVENTION AND TREATMENT
OF CHILD ABUSE AND NEGLECT

Child Fatalities by Abuse or Neglect
Rate Per 100,000*

Produced by:
Matthew J. Nalty

Date Updated: 9/19/2014

Data Source: Child Maltreatment



THE KEMPE CENTER
FOR THE PREVENTION AND TREATMENT
OF CHILD ABUSE AND NEGLECT

Child Fatalities by Abuse or Neglect
Above/Below 13yr Average
Rate Per 100,000*

Produced by:
Matthew J. Nalty

*Average rate range is calculated at 97.5% confidence intervals between 2000 - 2012
Data Source: Child Maltreatment

Date Updated: 9/19/2014

The Lancet – 9.12.11

Review

Child maltreatment: variation in trends and policies in six developed countries

Ruth Gilbert, John Fluke, Melissa O'Donnell, Arturo Gonzalez-Izquierdo, Marni Brownell, Pauline Gulliver, Staffan Janson, Peter Sidebotham

We explored trends in six developed countries in three types of indicators of child maltreatment for children younger than 11 years, since the inception of modern child protection systems in the 1970s. Despite several policy initiatives for child protection, we recorded no consistent evidence for a decrease in all types of indicators of child maltreatment. We noted falling rates of violent death in a few age and country groups, but these decreases coincided with reductions in admissions to hospital for maltreatment-related injury only in Sweden and Manitoba (Canada). One or more child protection agency indicators increased in five of six countries, particularly in infants, possibly as a result of early intervention policies. Comparisons of mean rates between countries showed five-fold to ten-fold differences in rates of agency indicators, but less than two-fold variation in violent deaths or maltreatment-related injury, apart from high rates of violent child death in the USA. These analyses draw attention to the need for robust research to establish whether the high and rising rates of agency contacts and out-of-home care in some settings are effectively reducing child maltreatment.

Published Online
December 9, 2011
DOI:10.1016/S0140-6736(11)61087-8

MRC Centre of Epidemiology for Child Health, UCL Institute of Child Health, London, UK (Prof R Gilbert MD, A Gonzalez-Izquierdo PhD); Child Protection Research Center, American Humane Association, Englewood, CO, USA (J Fluke PhD); Centre for Child Health Research,

Kempe

School of Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

Aim of the Study

Trends in child maltreatment are of great importance for children and their families, practitioners, and policy makers. In high income countries policy and practice thresholds for child maltreatment decisions shift making trends, positive or negative, difficult to discern and interpret.

- What can be understood about these trends by using multiple indicators?
- What can we learn about child protection policy by looking at trends across several countries facing similar challenges?
- Can the use of consistent enumeration methods help to elucidate trends due to such factors as occurrence, policy, and case mis, and random chance?

Focus of the Study

- **6 countries/states**
  - Sweden, England, Western Australia, New Zealand, Manitoba (Canada), USA
- **3 types of indicators – children < 11yr**
  - Violent death
  - Maltreatment-related injury admission
  - Child protection contacts (notification, investigation, substantiation, neglect, physical abuse, out of home care (children not episodes)

Kempe

School of Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

Violent Death Indicator

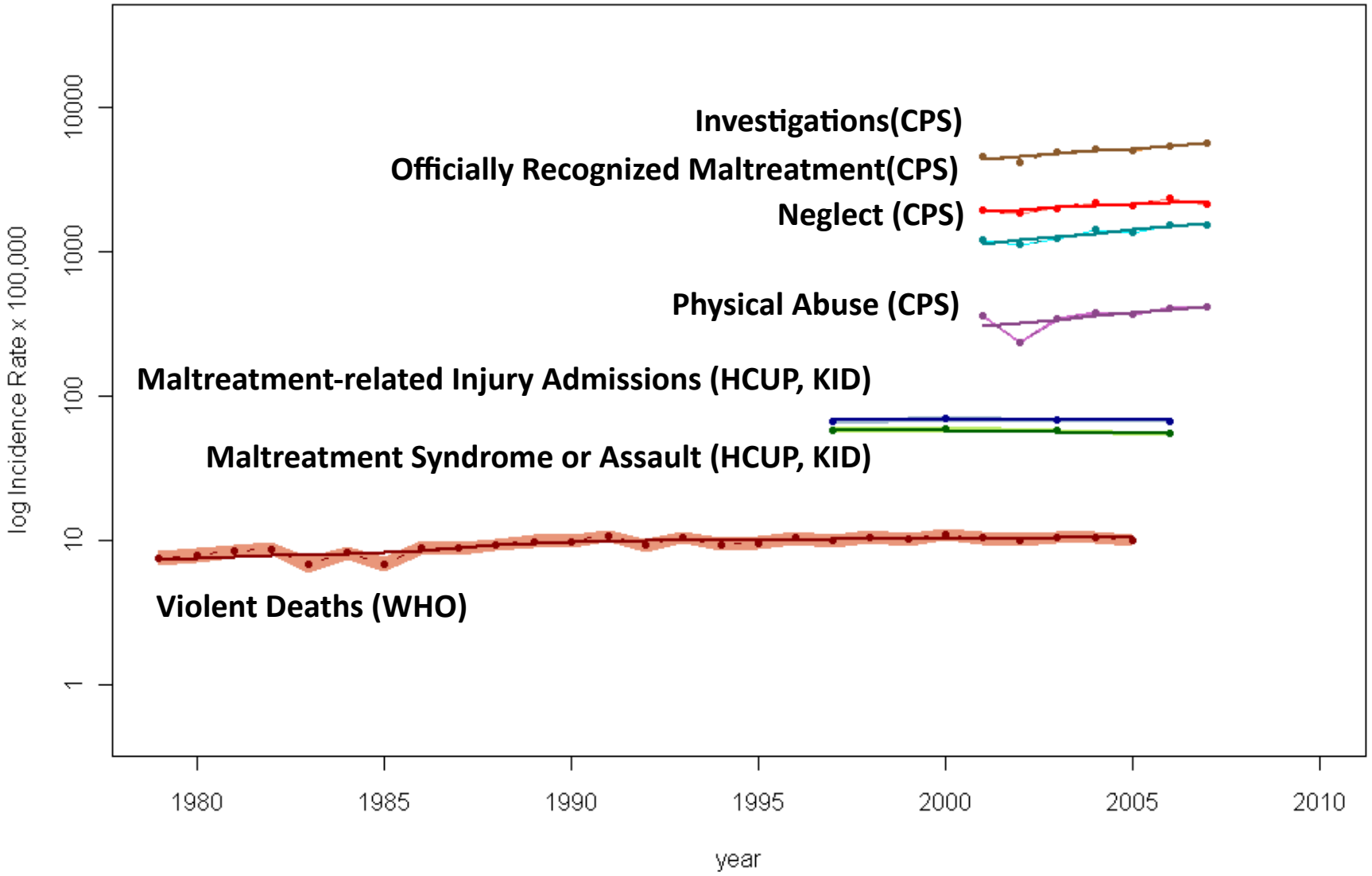
- ICD 9 and 10 Codes
- Sourced from the World Health Organization (CDC is the Source in the US)

- *Violent death* - Due to homicide, inflicted injury, or injury of undetermined intent. Relates to physical abuse or assault. Violence may be perpetrated by carers (therefore physical abuse). If perpetrated by other adults or children violent death can, but not always, reflect inadequate supervision (neglect).

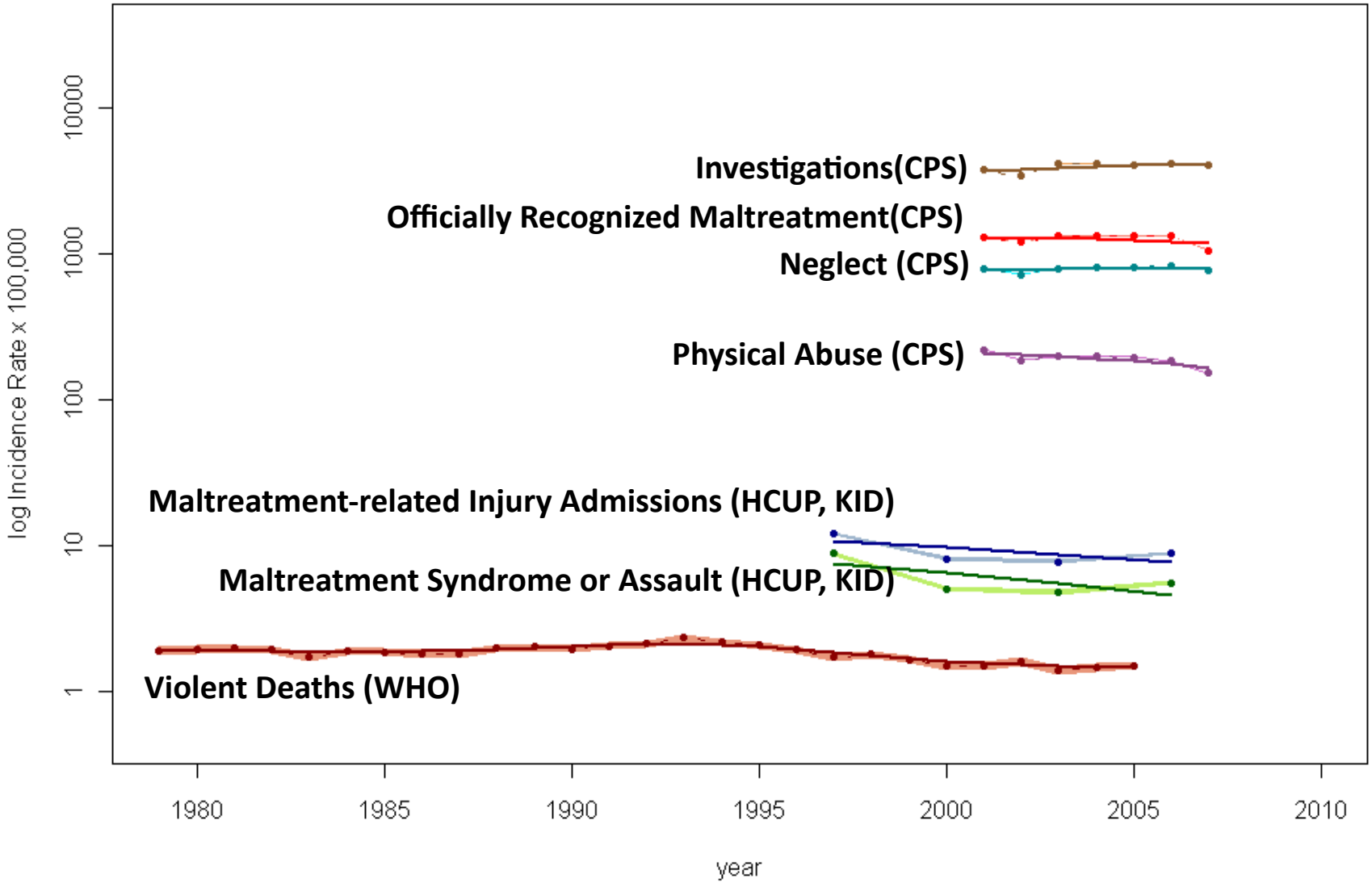
Kempe

School of Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

US Data Under Age 1



US Data Ages 1-10

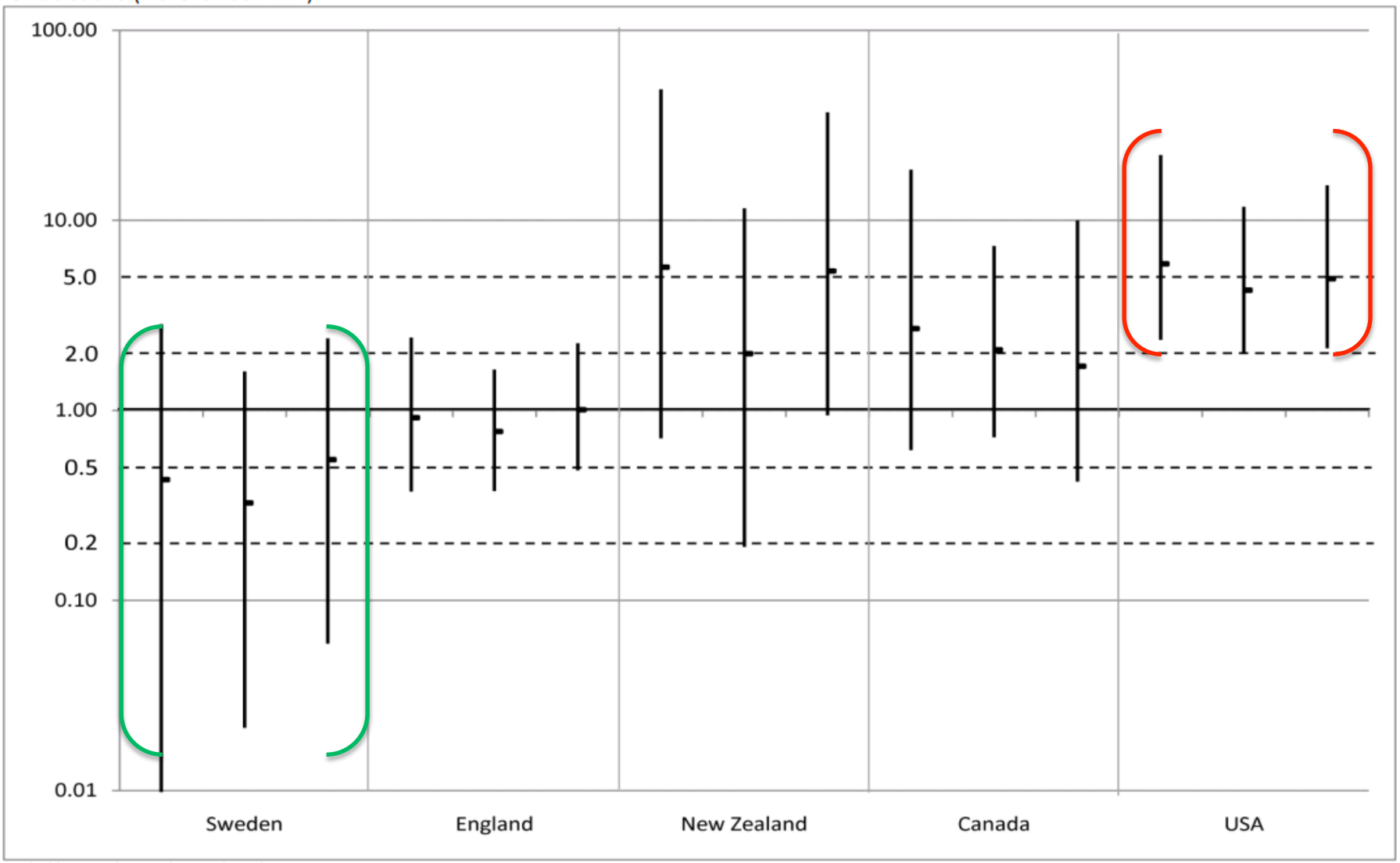


International comparisons for maltreatment related fatalities indicate children in the US are at great risk compared to other High Income Countries (HIC).

Kempe

School of Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

Violent deaths (Reference: WA)



Infants (left); 1-4y (centre), 5+y (right)

Does residency in the US constitute a type of risk factor for maltreatment fatality?

- Implications:
  - Prevention is key, public health strategies seem best poised to realize reductions in maltreatment fatalities as other approaches do not appear to have worked
  - The experience of other countries indicates that maltreatment related fatalities can be reduced, so we should be able to improve as well

- A dilemma:
  - Can we develop effective public health strategies to reduce maltreatment fatalities in the US in ways that are consistent with our values, or where our values are not in conflict?
  - A few ideas

Kempe

School of Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

Summing Up

- Measurement of maltreatment fatality
  - Consistent with public health principles
  - Guided by public health strategies, and definitions that are relevant for these strategies
  - Other needs for fatality data, while important, are less helpful at state and national levels in creating conditions for fatality reduction
- US values as Barriers and Opportunities
  - Identify short term strategies that are value neutral
  - Consider long term strategies that address values

Kempe

School of Medicine
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

Nurse Family Partnership

David Olds, PhD

Professor of Pediatrics

University of Colorado

September 22, 2014

Baltimore, 1970

NURSE FAMILY PARTNERSHIP

- Prenatal and infancy home visiting by nurses
- Focused on low-income mothers with no previous live births
- Clarity in goals, objectives, and methods
- Activates and supports parents' instincts to protect their children
- Strengths-based

NURSE FAMILY PARTNERSHIP'S THREE GOALS

1. Improve pregnancy outcomes
2. Improve child health and development
3. Improve parents' health and economic self-sufficiency

TRIALS OF PROGRAM

Elmira, NY 1977

N = 400

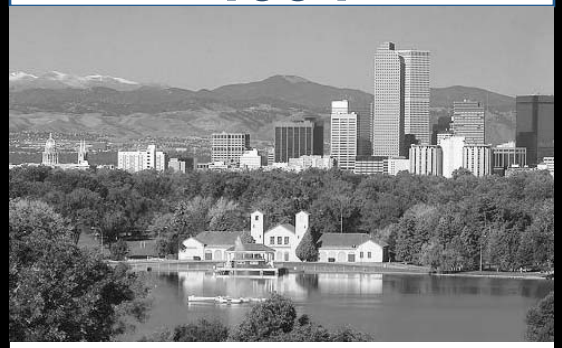
- Low-income whites
- Semi-rural

Memphis, TN 1987

N = 1,138 and N=743

- Low-income blacks
- Urban

Denver, CO 1994



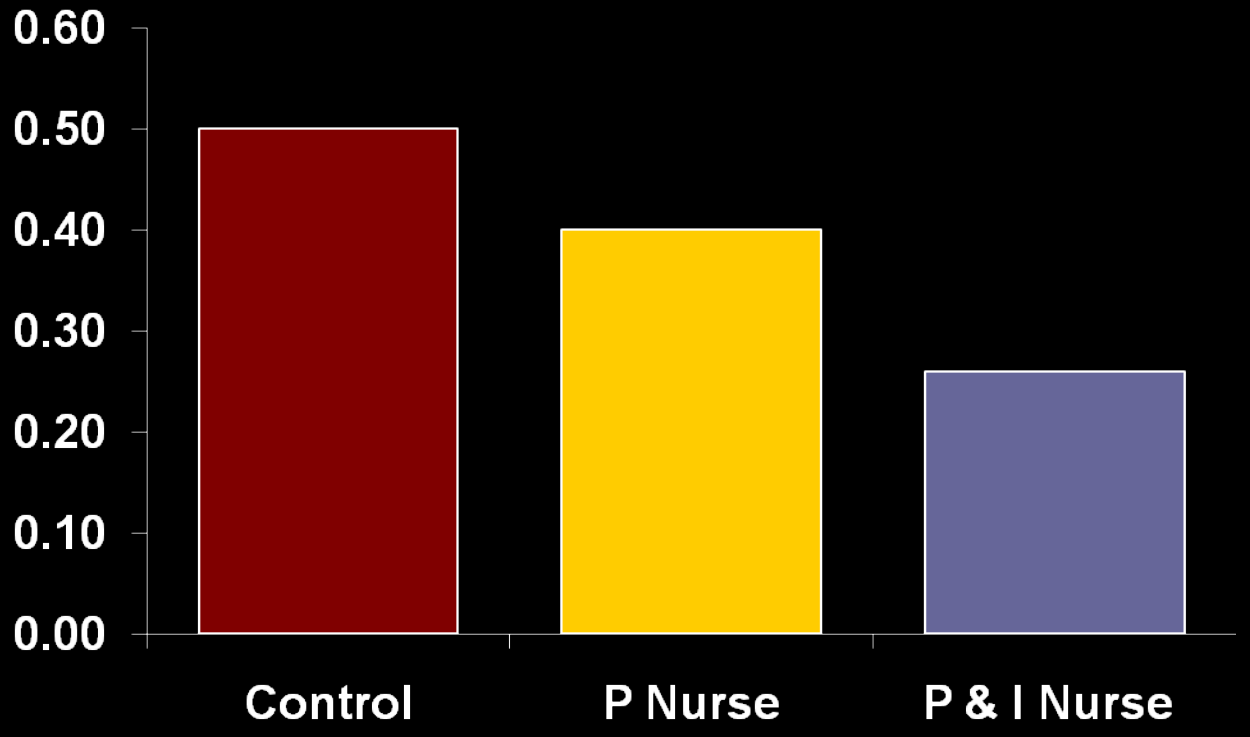
N = 735

- Large portion of Latino families
- Nurse versus paraprofessional visitors

CONSISTENT RESULTS ACROSS TRIALS

- Prenatal health
- Children's injuries
- Children's language and school readiness (low resource mothers)
- Children's behavioral problems
- Children's depression/anxiety
- Children's substance use
- Maternal Impairment due to substance use
- Short inter-birth intervals
- Maternal employment
- Welfare & food stamp use

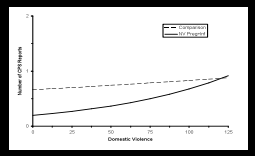
Indicated Cases of Child Abuse and Neglect 0 to 15 Years - Elmira



*P= .03

JAMA, 1997;278:637-643

Maltreatment Reports Involving the Study Child by Treatment Status and Domestic Violence



JAMA, 2000; 284: 1385-1391

Memphis Program Effects on Childhood Injuries (0 - 2 Years)

- 23% Reduction in Health-Care Encounters for Injuries & Ingestions
- 80% Reduction in Days Hospitalized for Injuries & Ingestions

JAMA 1997; 278: 644-652.

Diagnosis for Hospitalization in which Injuries and Ingestions Were Detected
Nurse-Visited (n=204)

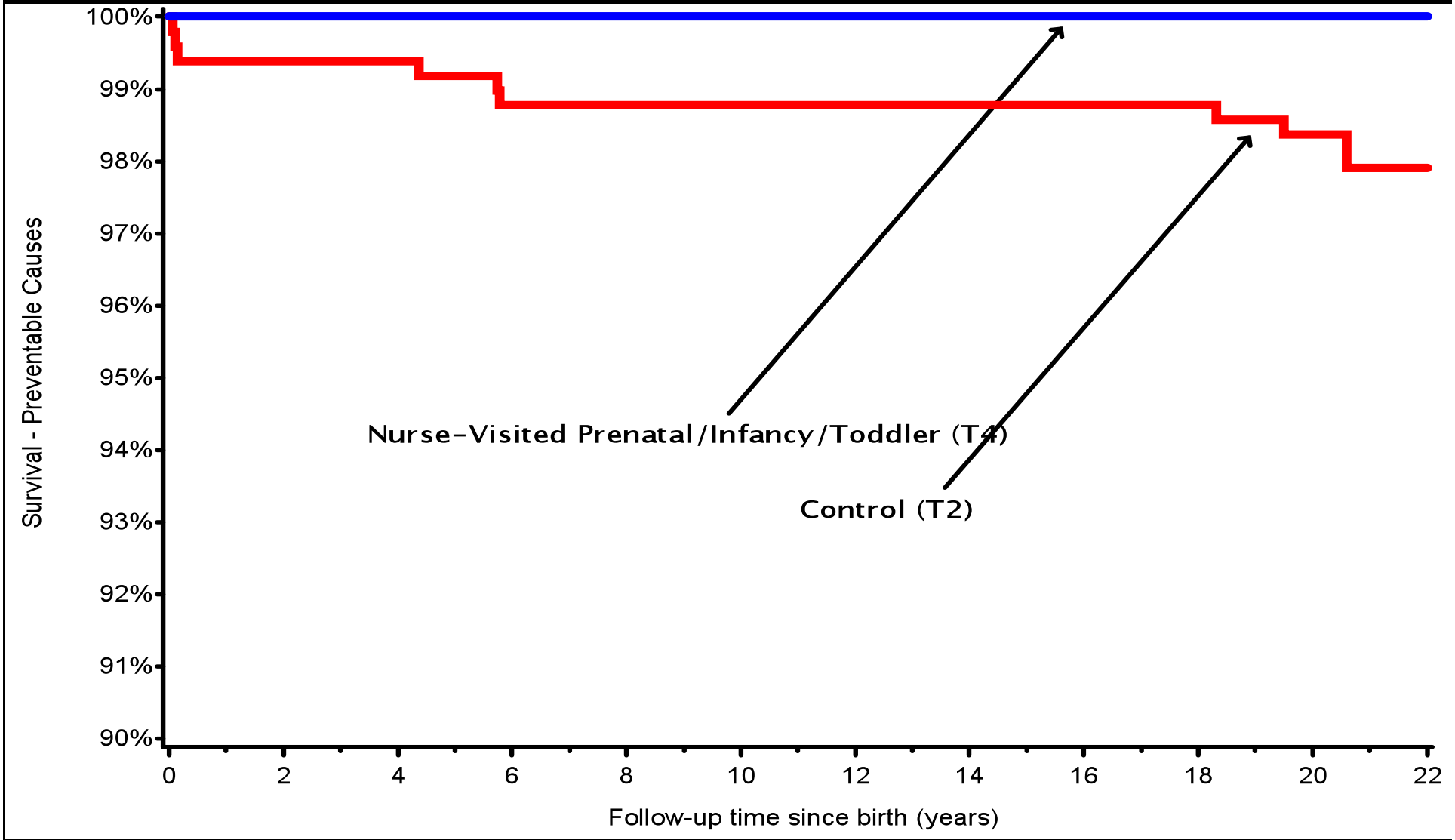
	Age (in months)	Length of Stay
▪ Burns (1^0 & 2^0 to face)	12.0	2
▪ Coin Ingestion	12.1	1
▪ Ingestion of Iron Medication	20.4	4

JAMA 1997; 278: 644-652.

Diagnosis for Hospitalization in which Injuries and Ingestions Were Detected - Comparison (n=453)

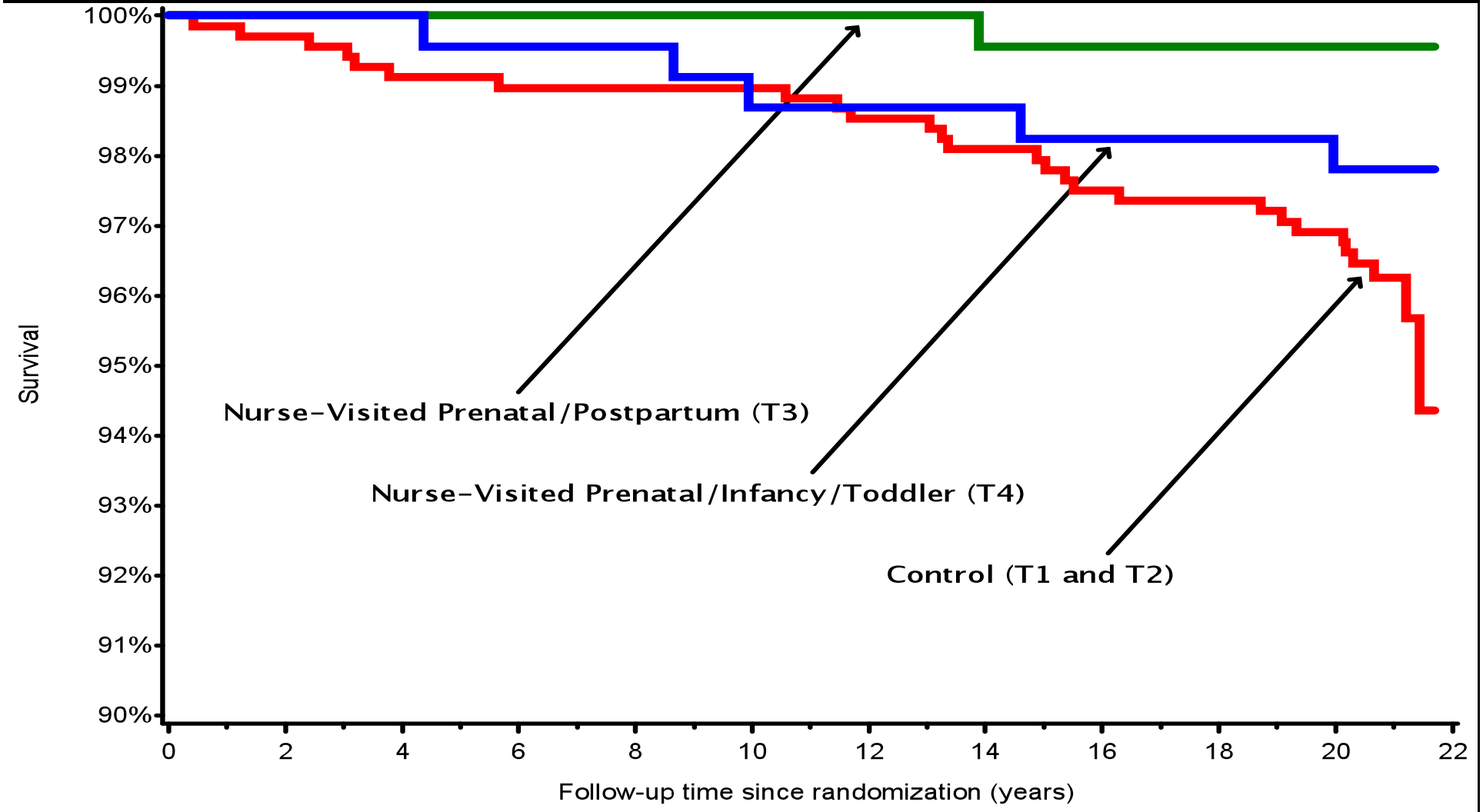
	Age (in months)	Length of Stay
▪ Head Trauma	2.4	1
▪ Fractured Fibula/Congenital Syphilis	2.4	12
▪ Strangulated Hemia with Delay in Seeking Care/ Burns (1^0 to lips)	3.5	15
▪ Bilateral Subdural Hematoma	4.9	19
▪ Fractured Skull	5.2	5
▪ Bilateral Subdural Hematoma (Unresolved)/ Aseptic Meningitis - 2nd hospitalization	5.3	4
▪ Fractured Skull	7.8	3
▪ Coin Ingestion	10.9	2
▪ Child Abuse Neglect Suspected	14.6	2
▪ Fractured Tibia	14.8	2
▪ Burns (2^0 face/neck)	15.1	5
▪ Burns (2^0 & 3^0 bilateral leg)	19.6	4
▪ Gastroenteritis/Head Trauma	20.0	3
▪ Burns (splinting/grafting) - 2nd hospitalization	20.1	6
▪ Finger Injury/Osteomyelitis	23.0	6

Survival plots for intervention and control children - preventable causes of death*



* Sudden Infant Death Syndrome, injury, homicide (T2 vs. T4 p=.02) *JAMAPEDIATRICS.2014.472.pages E1-E7.July 7, 2014*

Survival plots for intervention and control mothers – all causes of death



(T1+T2 vs. T3 p=.007; T1+T2 vs. T4 p=.19; T1+T2 vs. T3+T4 p=.008)

JAMAPEDIATRICS.2014.472.pages E1-E7.July 7, 2014

Nurse-Family Partnership

Helping First-Time Parents Succeed

FROM SCIENCE TO PRACTICE

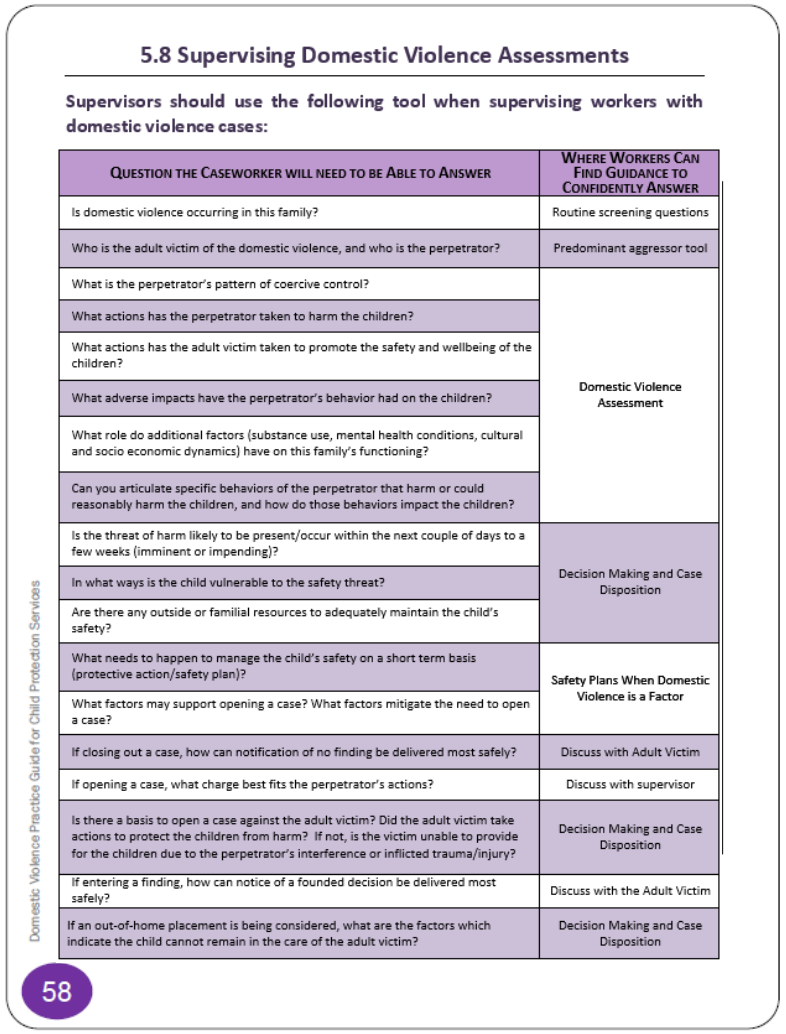
- Support Organizational and Community Capacity
- Education and Consultation
- Program Guidelines
- Information System
- Assessing Program Performance
- Continuous Improvement

Domestic Violence Perpetration: A Risk Factor for Child Fatalities

Elizabeth Collins

ecollins@ccadv.org

tiny.cc/CPSGuide



5.8 Supervising Domestic Violence Assessments

Supervisors should use the following tool when supervising workers with domestic violence cases:

Question the Caseworker will need to be Able to Answer	Where Workers Can Find Guidance to Confidently Answer
Is domestic violence occurring in this family?	Routine screening questions
Who is the adult victim of the domestic violence, and who is the perpetrator?	Predominant aggressor tool
What is the perpetrator's pattern of coercive control?	Domestic Violence Assessment
What actions has the perpetrator taken to harm the children?	
What actions has the adult victim taken to promote the safety and wellbeing of the children?	
What adverse impacts have the perpetrator's behavior had on the children?	
What role do additional factors (substance use, mental health conditions, cultural and socio economic dynamics) have on this family's functioning?	
Can you articulate specific behaviors of the perpetrator that harm or could reasonably harm the children, and how do those behaviors impact the children?	
Is the threat of harm likely to be present/occur within the next couple of days to a few weeks (imminent or impending)?	Decision Making and Case Disposition
In what ways is the child vulnerable to the safety threat?	
Are there any outside or familial resources to adequately maintain the child's safety?	
What needs to happen to manage the child's safety on a short term basis (protective action/safety plan)?	Safety Plans When Domestic Violence is a Factor
What factors may support opening a case? What factors mitigate the need to open a case?	
If closing out a case, how can notification of no finding be delivered most safely?	Discuss with Adult Victim
If opening a case, what charge best fits the perpetrator's actions?	Discuss with supervisor
Is there a basis to open a case against the adult victim? Did the adult victim take actions to protect the children from harm? If not, is the victim unable to provide for the children due to the perpetrator's interference or inflicted trauma/injury?	Decision Making and Case Disposition
If entering a finding, how can notice of a founded decision be delivered most safely?	Discuss with the Adult Victim
If an out-of-home placement is being considered, what are the factors which indicate the child cannot remain in the care of the adult victim?	Decision Making and Case Disposition

Children in the USA

Approximately 7 million American children estimated to live in families in which severe partner violence had occurred in prior year.

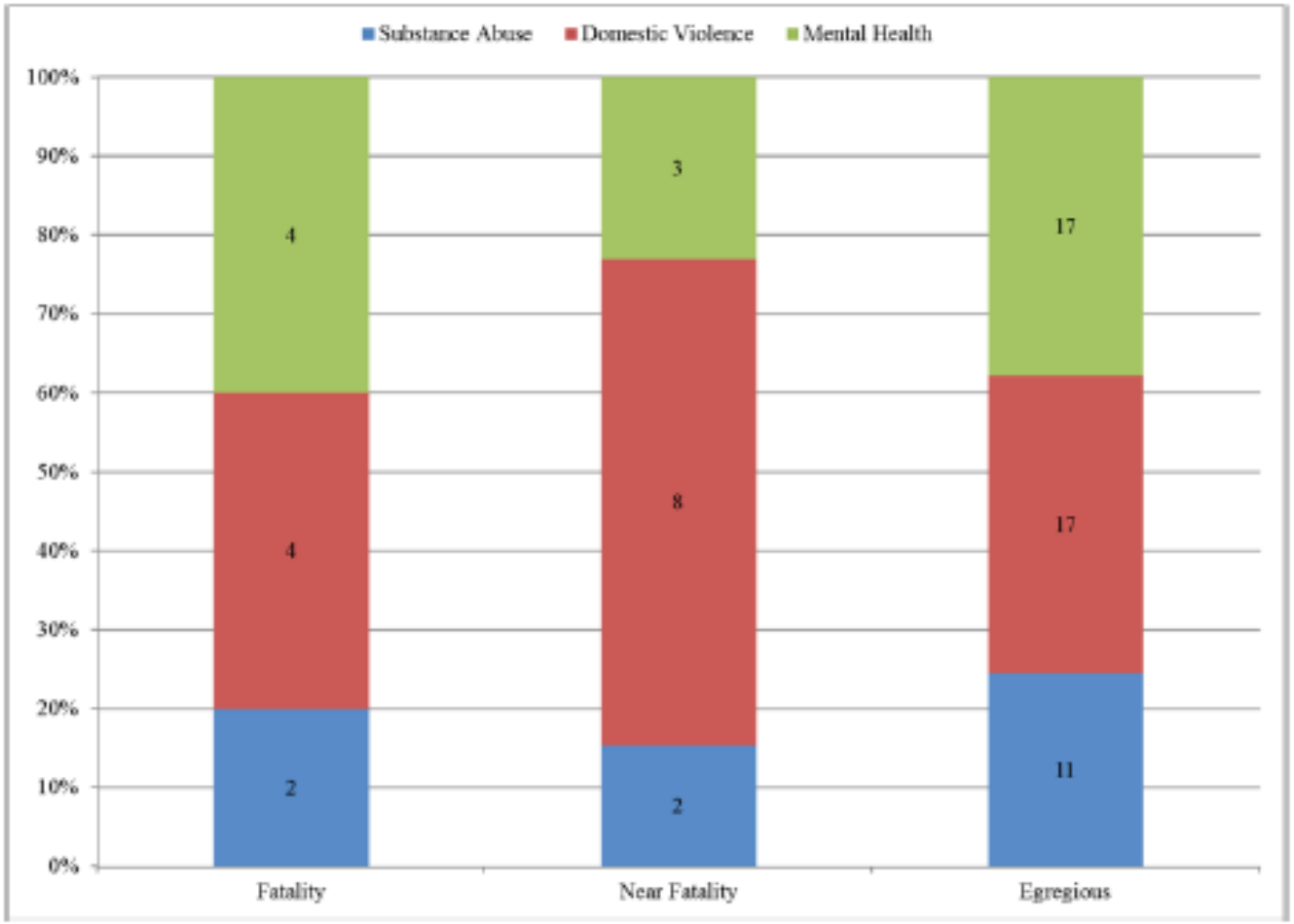
McDonald, R., Jouriles, E. N., Ramisetty-Mikler, S., Caetano, R., & Green, C. E. (2006). Estimating the number of American children living in partner-violent families. *Journal of Family Psychology*, *20*(1), 137.

Child exposure to domestic violence has an estimated 40% rate of co-occurrence with child maltreatment, according to a meta-analysis of 30 studies.

Edleson, Jeffrey L., Mbilinyi, Lyungai F., Shetty, Sudha. (2003). *Parenting in the Context of Domestic Violence*. San Francisco: Judicial Council of California, Administrative Office of the Courts, Center for Families, Children & the Courts, Page 1.

Available at http://www.courtinfo.ca.gov/programs/cfcc/resources/publications.

Chart 10: Other Family Stressors in Families of 76 Victims of Substantiated Child Maltreatment Fatalities, Near Fatalities, and Egregious Incidents*



*Some incidents involved co-occurring stressors, whereas not all families involved in these incidents experienced these stressors.

Domestic Violence

39.7%

in CO

2013 Child Maltreatment Fatality Review Report

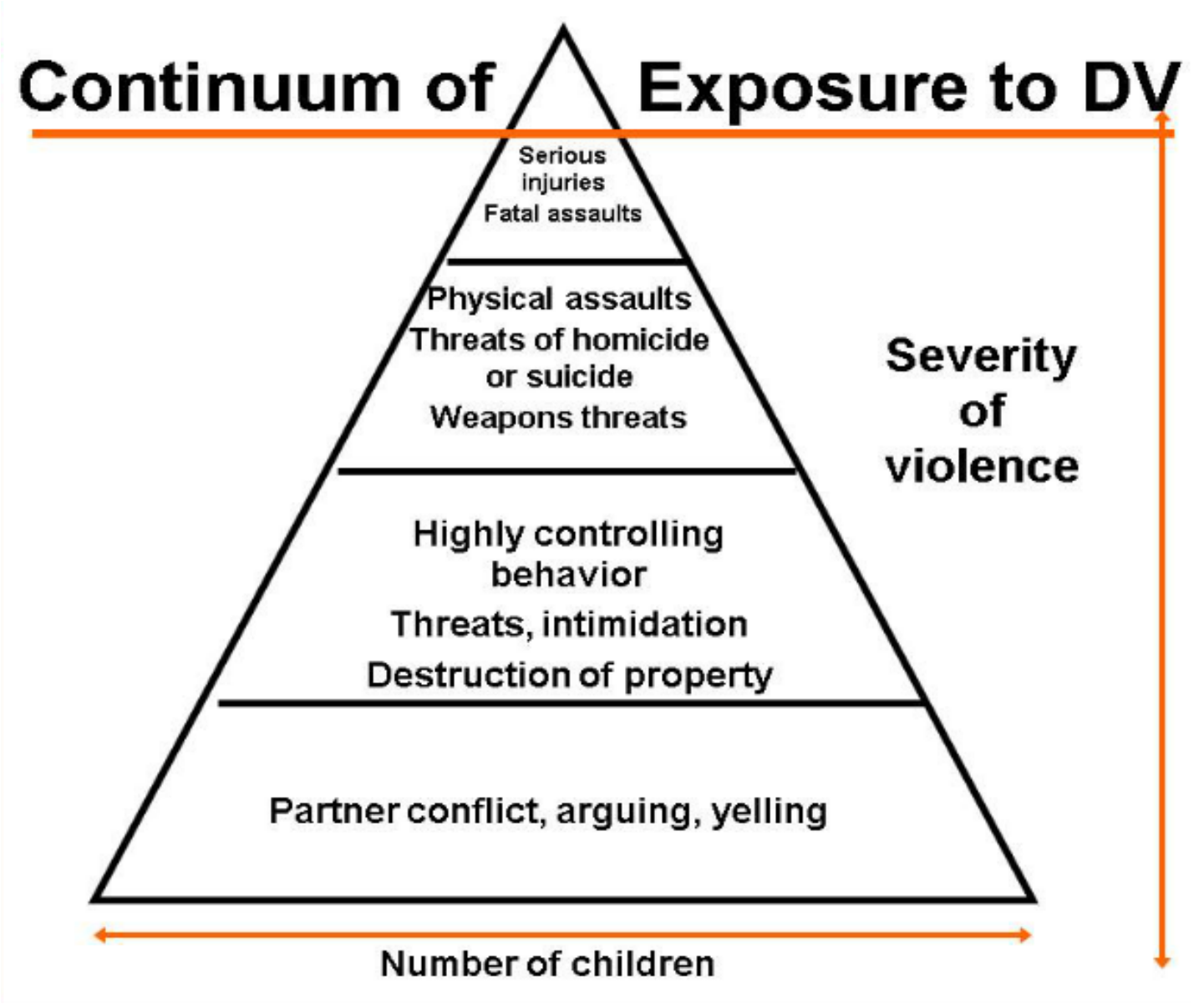
Issued July 1, 2014 by the Colorado Department of Human Services' Child Fatality Review Team

- "Nationally,
  - 6.3% of child maltreatment fatalities involved alcohol abuse as a risk factor,
  - while 20.1% involved domestic violence,
  - and 17.3% involved drug abuse."

In Colorado 17.4% of substantiated fatalities occurred in families with domestic violence perpetration.

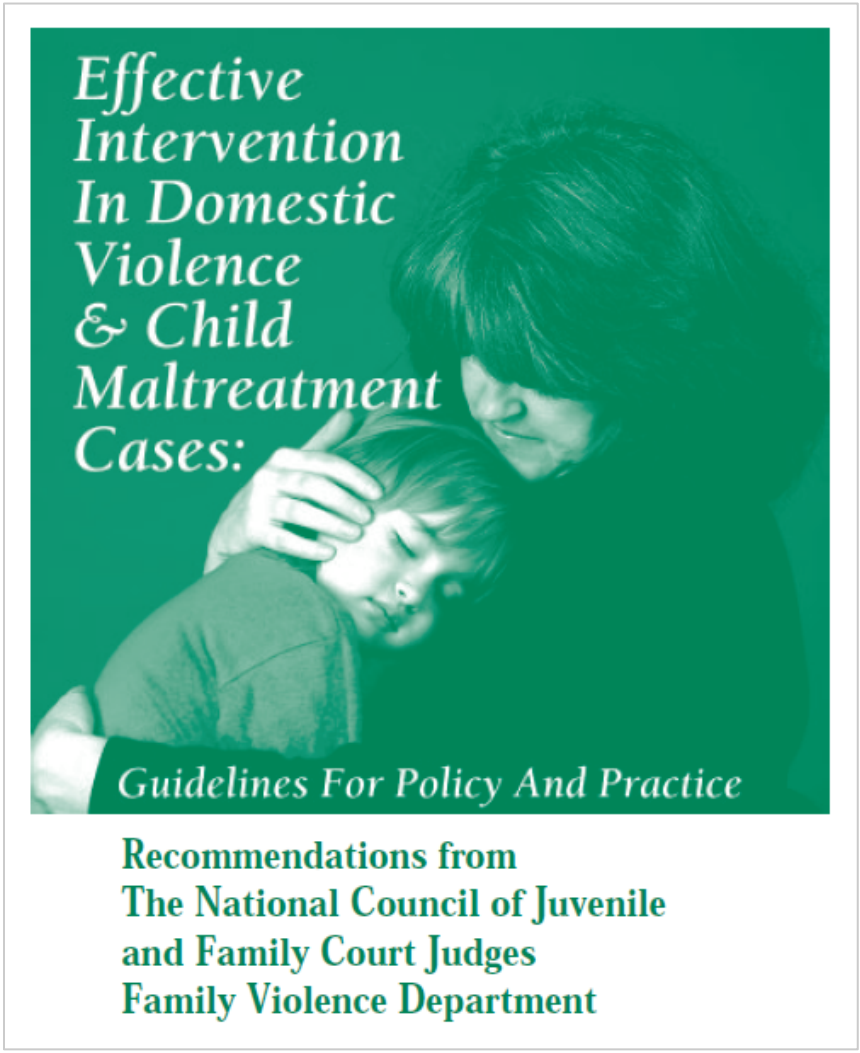
2013 Child Maltreatment Fatality Review Report
Issued July 1, 2014 by the Colorado Department of Human Services' Child Fatality Review Team

Retrieved from:
http://www.colorado.gov/cs/Satellite?c=Document_C&childpagename=CDHS-Emp%2FDocument_C%2FCBONAddLinkView&cid=1251654864525&pagename=CBONWrapper

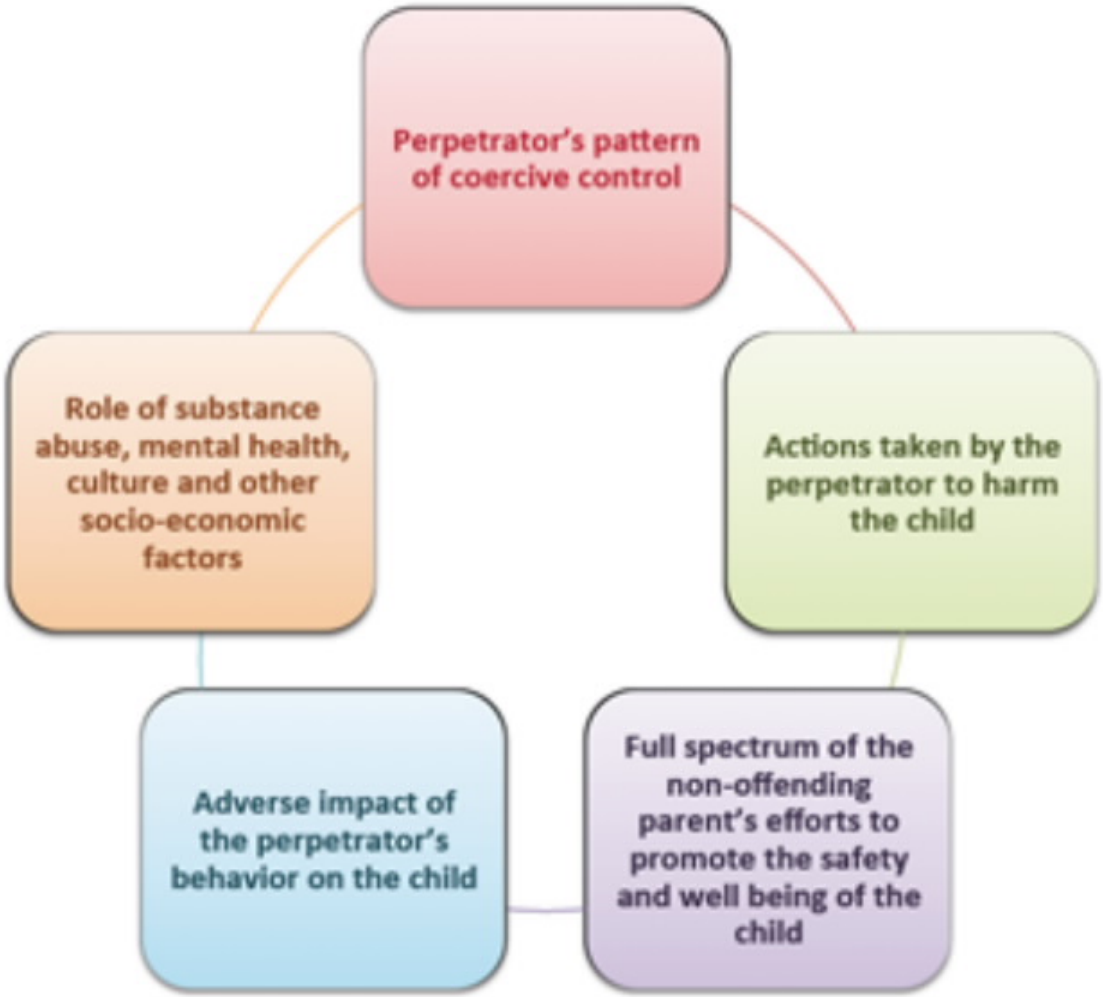


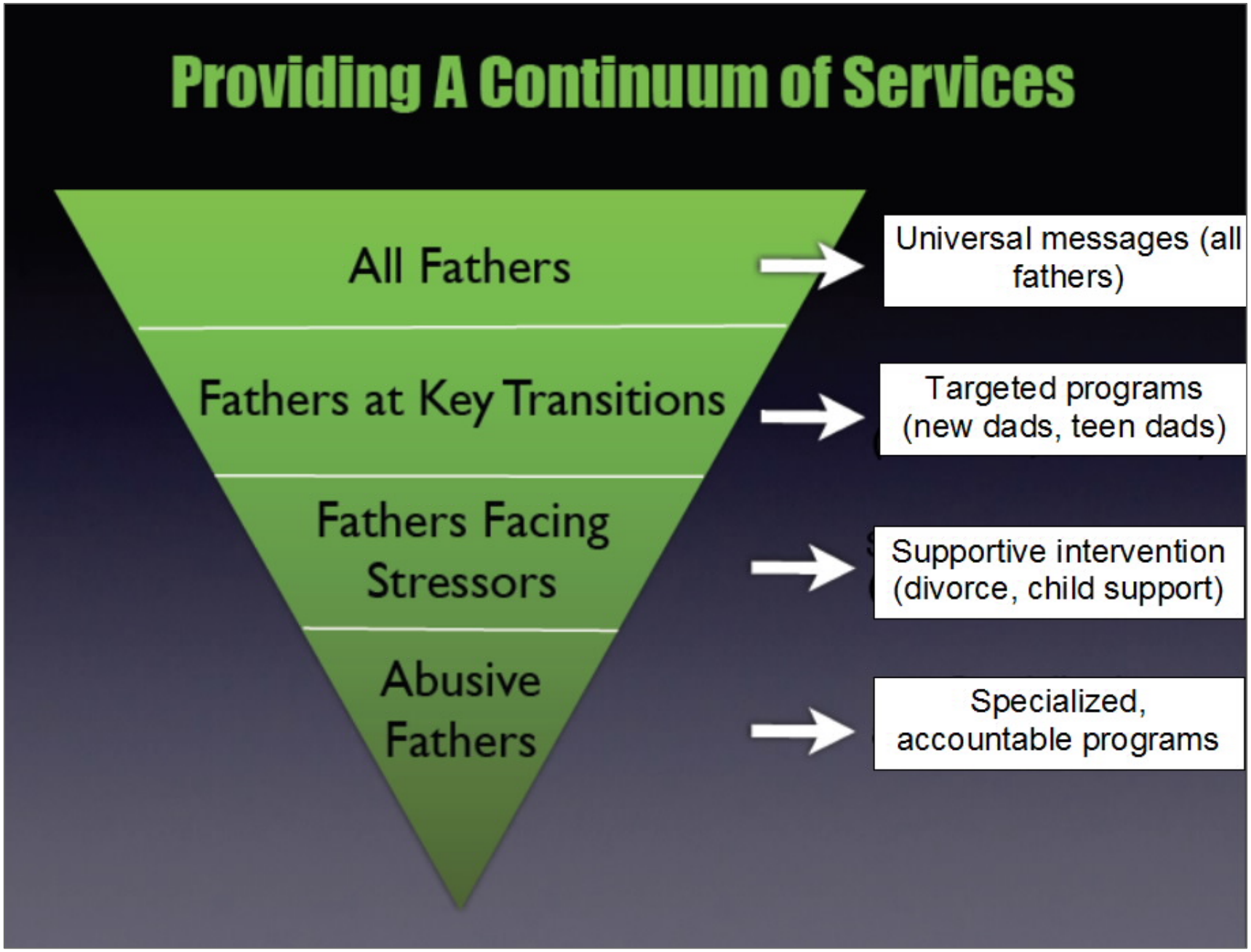
Susan Blumenfeld, MSW, LCSW www.nationalcenterdvtraumamh.org

Colocation of Advocates from Anti-Domestic Violence Organizations



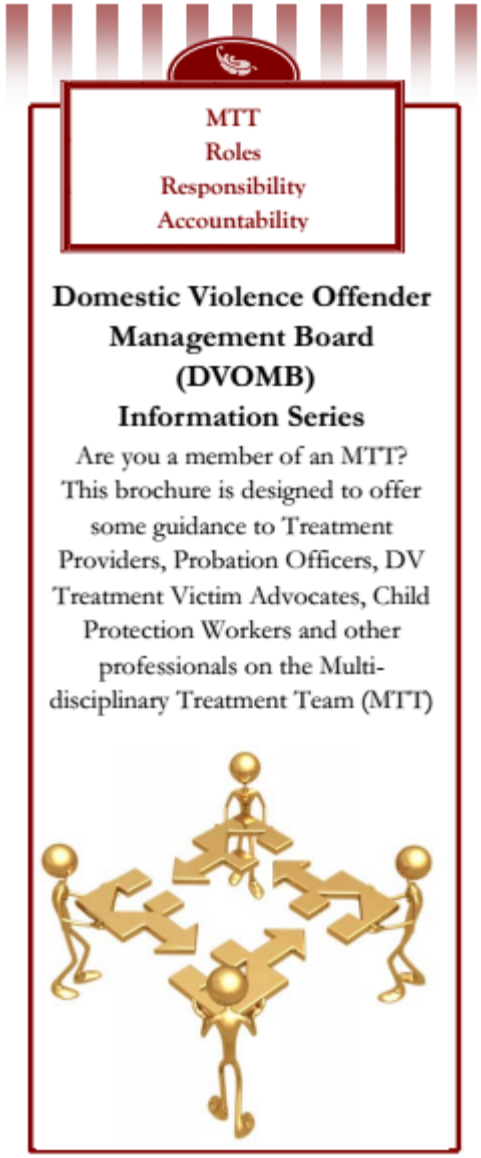
Safe and Together™ Critical Components




Providing A Continuum of Services
All Fathers
Fathers at Key Transitions
Fathers Facing Stressors
Abusive Fathers
Universal messages (all fathers)
Targeted programs (new dads, teen dads)
Supportive intervention (divorce, child support)
Specialized, accountable programs

Section Eight: Building Coordinated Responses to Domestic Violence

This section of the guide builds social workers' knowledge about coordination with community programs and services to enhance child welfare's response to domestic violence. According to the Greenbook Project, enhancing coordination and communication between and among community programs and services is the single most effective method to build seamless, coordinated systems that provide accessible, timely services that help families thrive. Ideally, families impacted by domestic violence and involved with child welfare should be able to easily access educational, mental health, substance abuse, legal, financial, and other services they need in the community to ensure safety, enhance well being, and provide stability for children and families.



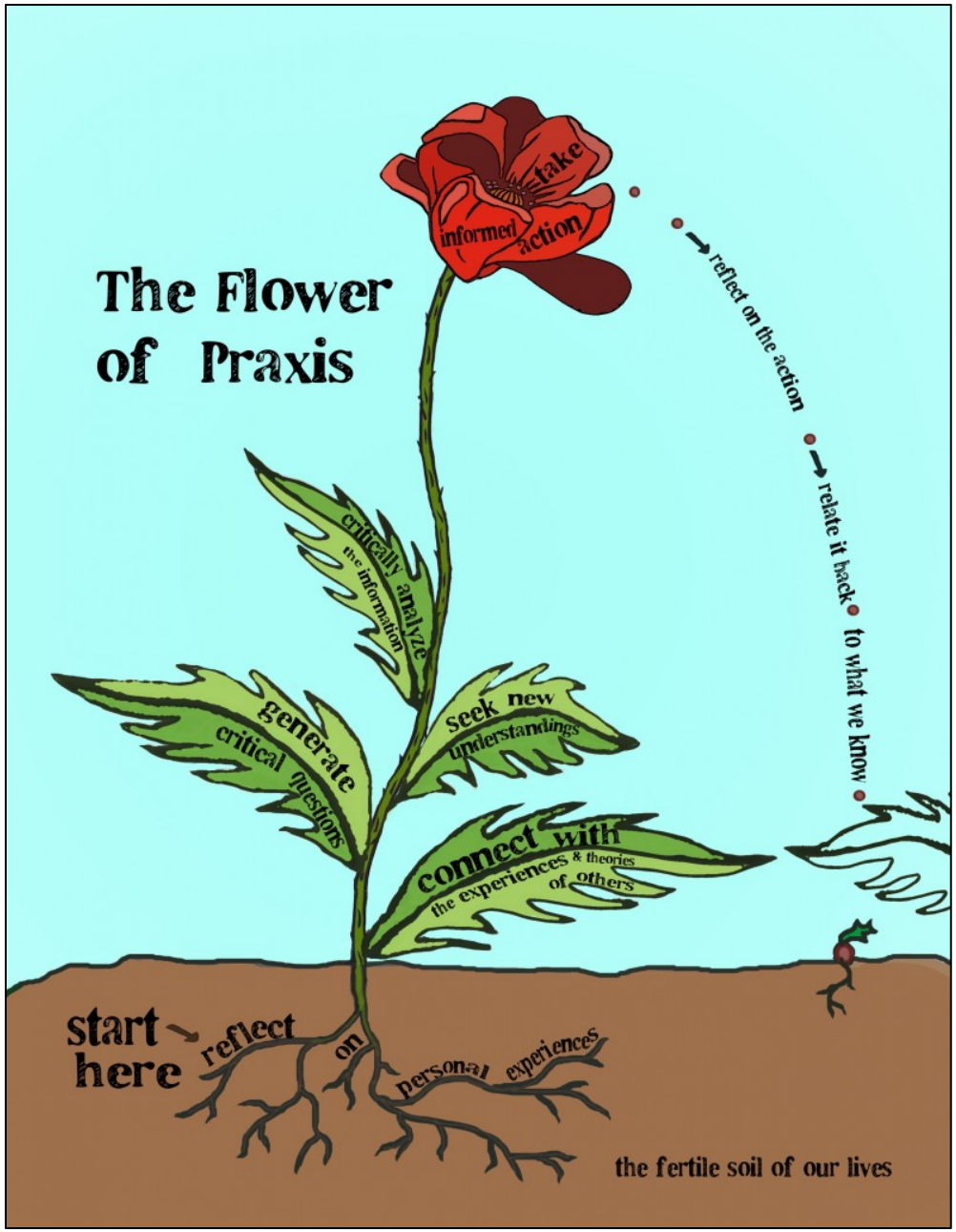
Guiding Principle

"When there is a co-occurrence of domestic violence and child maltreatment, the safety of children and youth is enhanced through

- promoting adult victim safety and empowerment,
- holding the perpetrator accountable,
- and engaging in community collaboration(s)."

Addressing Child Maltreatment and Domestic Violence

- The Domestic Violence High Risk Team
  - www.jeannegeigercrisiscenter.org/dvhrtn.html?pg=01
- Greenbook Initiative
  - www.thegreenbook.info
- Caring Dads
  - www.cebc4cw.org/program/caring-dads-helping-fathers-value-their-children/
- Kids' Club and Mom's Empowerment Group
  - www.cebc4cw.org/program/kids-club-moms-empowerment/detailed
- Safe and Together Model
  - endingviolence.com
- National LINK Coalition
  - nationallinkcoalition.org



commonaction.blogspot.com/2012/12/conscientization-in-my-life.html

Assessing Present and Prospective Child Safety: A View From the Healthcare Service Venue

Substance Exposed Newborns

Serving Families Impacted by Prenatal Substance Use

Presentation for:
Commission to Eliminate Child Abuse and Neglect Fatalities
Denver, CO
September 22, 2014

Kathryn Wells, MD, FAAP

- Medical Director, Denver Health Clinic, Family Crisis Center
- Clinical Researcher, Kempe Center
- Associate Professor, University of Colorado Pediatrics
- Co-Chair, Substance Exposed Newborns Steering Committee, State Substance Abuse Trend and Response Task Force

Children in Substance-Abusing Homes

Combined data from 2002 to 2007 indicate that over 8.3 million children under 18 years of age (11.9 percent) lived with at least one parent who was dependent on or abused alcohol or an illicit drug during the past year

Children of Parents with Substance Abuse Problems

- Have poorer developmental outcomes (physical, intellectual, social and emotional)
- 2.7X more likely to experience physical, verbal, or sexual abuse
- 4.2X more likely to be neglected
- 3 to 8X greater risk for substance abuse themselves

Substance Abuse Affects Parenting

- Impaired attachment
- Impaired judgment and priorities
- Inability to provide the consistent care, supervision, necessities, and guidance children need
- Substance abuse is a critical factor in ~7-8 out of 10 child welfare cases

Impact on Children

- Impaired Caregivers
  - Lack of Supervision
  - Lack of Necessities
  - Abuse or Neglect
- Injurious Environment
  - Access to Drugs/Alcohol
  - Access to Paraphernalia
  - Cultivation/Manufacture Aspects

A Pregnant Woman Using Substances is…

- A woman with an addiction who got pregnant
- Desperately wanting a healthy baby
- Consumed with guilt
- Hypersensitive to signs of withdrawal
- Accustomed to disrespect & disdain
- Grateful to anyone who treats her with respect & dignity

A Pregnancy is…

- Incentive to quit
- Added stress
- A short time to change behavior, social life and relationships

A Substance Is…

- Legal: alcohol, marijuana, tobacco
- Illegal: heroin, cocaine, methamphetamines, etc.
- Prescription Drugs: narcotics, barbiturates, psychotropics, and amphetamines
- Poly-substance use

Wide SPECTRUM of use and abuse

Prevalence in Colorado

- Prescription drug abuse in Colorado
  - Oregon #1 6.37%
  - **Colorado #2 6.0% (age 18-24yr 14%)**
  - Iowa is #50 3.62%
- Binge drinking females (≥ 4/episode) - National
  - Highest among white and income ≥$75K

    (can afford to "party" on weekends; may underestimate risk of unintended pregnancy)

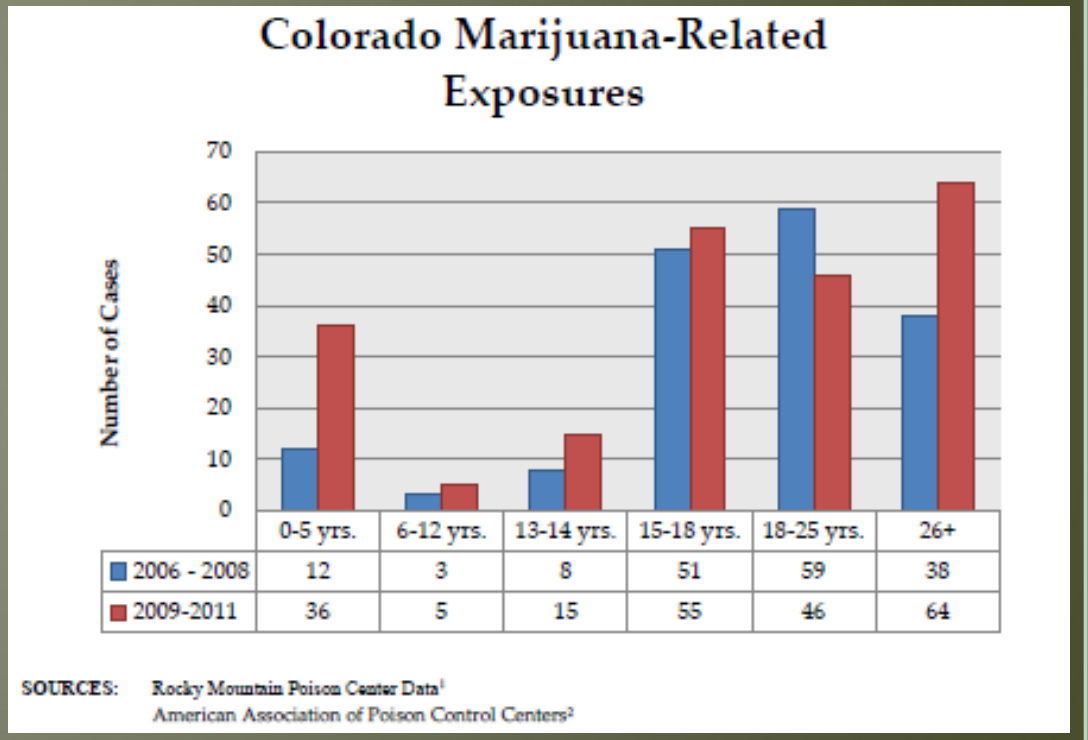
Colorado MJ Exposure & Ingestion

- Colorado Children's Hospital reports an increase in treatment of children (8 mo - 12 yr) for unintentional exposure to marijuana
  - 2005 – 2009: 0 marijuana exposures
  - 2009 – 2011: 14 marijuana exposures
    - 8 of the exposures were from medical marijuana
    - 7 of the exposures were from marijuana-infused food products
    - 8 admitted, 2 admitted to the pediatric intensive care unit
- Symptoms
  - 9 had lethargy
  - 1 had ataxia
  - 1 had respiratory insufficiency

Marijuana-Related Exposures

Rocky Mountain Poison Drug Control centers report :

- 2006–2008 = average # of exposures for ages 0 to 5 = 4 per year
  - 7% of all marijuana exposures were children 0 – 5 = 2x the national average
- 2009–2012 = average # of exposures for ages 0 to 5 was 12 per year
  - 16.2% of all marijuana exposures were children 0 – 5 = 3x the national average



	0-5 yrs.	6-12 yrs.	13-14 yrs.	15-18 yrs.	18-25 yrs.	26+
2006 - 2008	12	3	8	51	59	38
2009-2011	36	5	15	55	46	64

SOURCES: Rocky Mountain Poison Center Data[1]
American Association of Poison Control Centers[2]

Other Marijuana Risks

Growing and Cultivating

Presence of:

- Growing/Processing Rooms
- Hash Oil Labs

Hazards:

- Electrical /Chemical
- Air Quality/Mold & Fungus
- THC

Dealing and Trafficking

Presence of:

- Weapons/Money/Packaging
- Paranoia

Exposure to:

- Potential for Violence/Burglary
- Organized Crime
- Unpredictable Environment
- Unknown Adults

Marijuana & Pregnancy

- 4-5% of women use marijuana during pregnancy (estimates range from 2.5 to 27%)
- 60% of cannabis users continued to use ~10 joints/week throughout pregnancy (60-70% of the level of use the year before)
- Many women reporting cannabis use for nausea and vomiting during pregnancy

Under-Estimation of Cases

- Little data exist on the extent of the problem and successful approaches to address it
- Fear of criminal prosecution and child welfare reduces utilization of medical and treatment resources
- Social stigma for mothers and families
- Unreliability of mothers' self-reports
- Lack of uniformity in hospital policies and procedures for screening, testing, referrals
- Limitations of toxicology testing techniques
- Poor systems tracking

Prevalence during Pregnancy in U.S.

Substance (past mo)	**1st tri**	**2nd tri**	**3rd tri**
	(National Prevalence)		
Any Illicit	8.5%	3.2%	**2.3%**
Alcohol	20.4%	6.5%	**3.5%**
Binge Alc	11.9%	0.9%	**0.8%**
Cigarettes	22.4%	12.6%	**11.6%**

Results from the 2007 National Survey on Drug Use and Health

Prevalence in Pregnancy in U.S.

Illicit drug use in pregnancy by **age**

(national prevalence)

	15-17	18-25	26-44
2008-09	**15.8 %**	**7.1%**	**2.3%**
2012-13	**14.6%**	**8.6%**	**3.2%**

Prevalence during Pregnancy

- Pregnant women use Alcohol and Other Drugs (AOD) less than non-pregnant women of their same age
- Except, pregnant teens aged 15-17yrs use AOD more than non-pregnant teens
- Substance use decreases throughout pregnancy
- Substance use rebounds by 3 months after delivery and continues to increase

Effects Vary Widely

- Effects are variable -- on mother, baby or both
- **Alcohol is most dangerous to fetal brain & body**
- Smoking affects largest numbers (easiest to study)
- Illegal drugs – data are often confounded by poly-substance use, poverty, violence, genetics, etc.
- Good home environment helps

No Safe Amount of Drugs or Alcohol During Pregnancy

Emerging Issues

- Advancing research on fetal alcohol spectrum disorders and Alcohol-related Neurodevelopmental Disorders
- Child Abuse Prevention and Treatment Act (CAPTA) amendments of 2003 and 2010
- Increased number of pregnant women and children affected by maternal use of methamphetamine
- Rising rates of prescription drug abuse
- Medical Marijuana & Amendment 64 (Colorado)

Child Abuse Prevention and Treatment Act (CAPTA)

- Reauthorized in 2003, amended 2010
- Established new state responsibilities regarding prenatally exposed infants
- States must have in place:

  106(b)(2)(B)(ii) "Policies and procedures (including appropriate referrals to child protection service systems and for other appropriate services) to address the needs of infants born and identified as affected by illegal substance abuse or withdrawal symptoms resulting from prenatal drug exposure or a Fetal Alcohol Spectrum Disorder, including a requirement that health care providers involved in the delivery or care of such infants notify the child protection services system of the occurrence of such condition in such infants, except that such notification shall not be construed to:

  (I) Establish a definition under Federal law that constitutes child abuse; or

  (II) Require prosecution for any illegal action"

  (iii) "The development of a plan of safe care for the infant born and identified as being affected by illegal substance abuse or withdrawal symptoms or Fetal Alcohol Spectrum Disorder"

Colorado State Meth Task Force SEN Subcommittee

- Began in September 2008
- Multiple disciplines including healthcare providers, substance treatment, mental health, child welfare and criminal justice
- Passed HB12-1100, creating CRS 13-25-136

New Colorado Legislation

- **CRS 13-25-136** reduces risk of prosecution of pregnant women:

  No information relating to substance use not otherwise required to be reported pursuant to C.R.S. 19-3-304, obtained as a part of a screening or test for purposes of prenatal care, of a woman who is pregnant or determining if she is pregnant, shall be admissible in any criminal proceeding. Nothing in this section should be interpreted to prohibit prosecution of any claim or action related to such substance use based on independently obtained evidence.

- Created through HB12-1100 & Signed 3/9/12

Colorado State Meth Task Force SEN Subcommittee

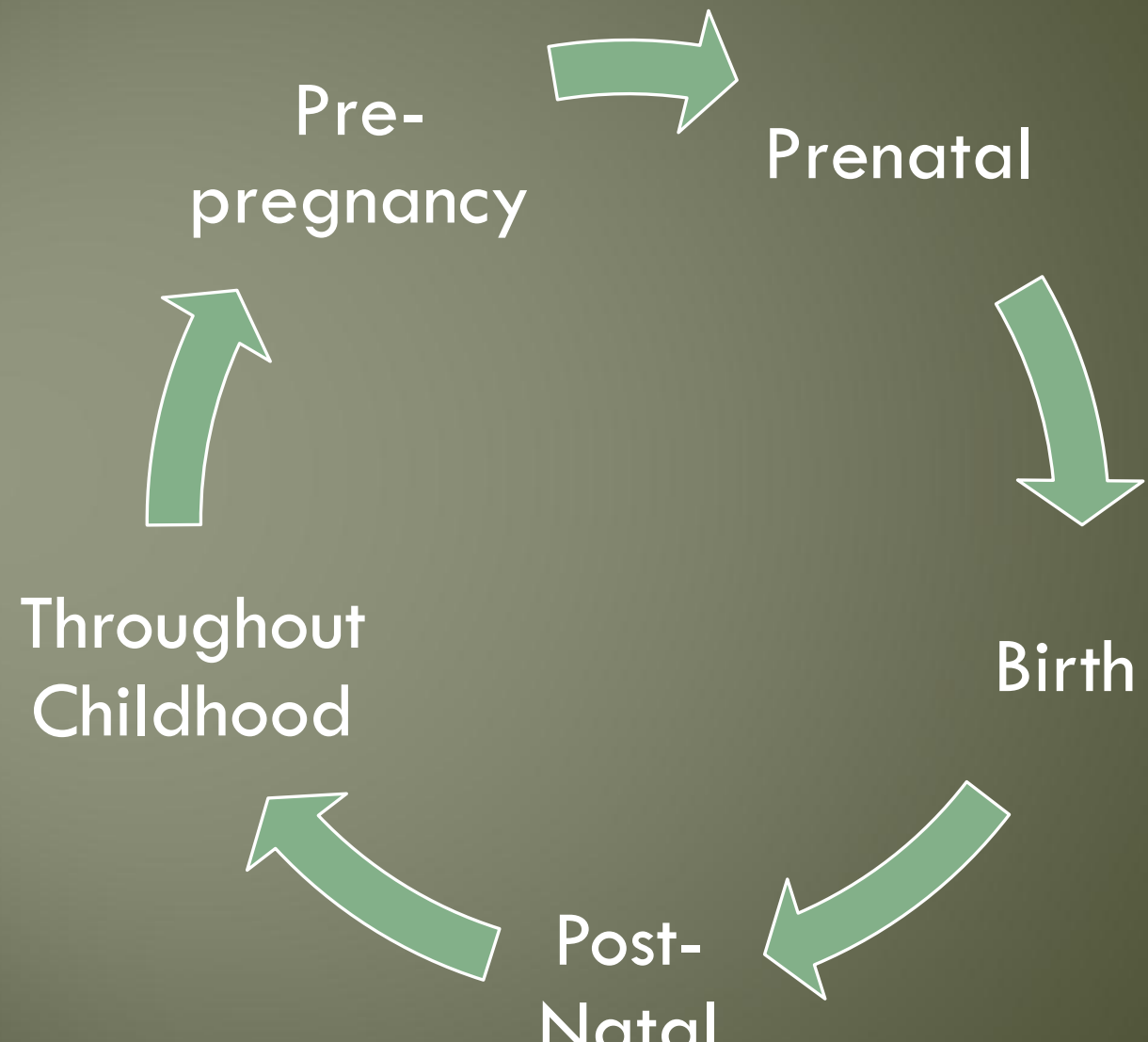
- Focused specifically on issues related to prenatal substance exposure
- Released Report

  Serving Families Impacted by Prenatal Substance Abuse: Recommendations for Policy and Practice

  www.coloradodec.org/substanceexposednewborns.html
- Addressing the impacts across a continuum –

  The Five Points of Intervention

Five Points of Intervention



Gardner, S. & Young. N., National Center on Substance Abuse and Child Welfare

Pre-Pregnancy

SEN Steering Committee Recommendations:

- Increase awareness (billboards, points of sale, etc.)
- Integrate Prevention & Education Info into Public Education System
- Standardize information about SEN in the training curricula for providers that serve women

Prenatal Screening & Services

Recommendations from SEN Steering Committee:

- Increase utilization of available treatment programs for pregnant women in Colorado
- Medical providers:
  - Guidelines and Standards of Care
  - Universal baseline and ongoing screening– standardized tools and scripting
  - Enhance referral networks
  - Universal baseline and periodic ongoing testing–
    - With or without consent
    - New Colorado law protects information

Prenatal Screening and Services

Recommendations from SEN Steering Committee:

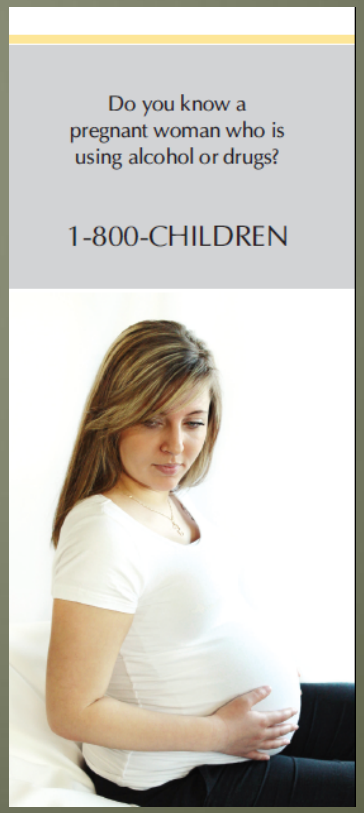
- Criminal Justice
  - Universal screening for AOD Use
  - Referrals to Treatment and Prenatal Care
  - Multidisciplinary Planning around Birth Options in Case of Incarceration
- Child Welfare, Behavioral Health, Human Services & Community Organizations
  - Universal screening for AOD Use
  - Referrals to Treatment and Prenatal Care

One Call for Treatment Resources

- Statewide toll-free Family Support line by Families First and Prevent Child Abuse Colorado:
  - 1-800-CHILDREN (1-800-244-5373)
  - 1-866-LAS-FAMILIAS (1-866-527-3264)
- Information for women on local substance abuse treatment resources and other community services
- Parental support; compassionate listening
- Public information

One Call for Treatment Resources

- Materials available for women's services providers
  - 4-fold Brochure
  - Business card
  - Poster
  - Magnet



Birth

Recommendations from SEN Steering Committee:

- Universal screening for AOD Use
  - Scripting, tools, documentation, further assessment
- Testing mothers- clearly defined indications
  - Scripting, documentation, further assessment
- Testing infants- clearly defined indications
  - Including mother's positive screen/test
  - Scripting, documentation, further assessment
  - Referral to DHS required by law for illegal substances, recommended for all AOD use

Colorado Children's Code 19-1-302(1)(g)

- (1) A child is neglected or dependent if:
  - (g) The child tests positive at birth for either a schedule-I controlled substance, as defined in section 18-18-203, C.R.S., or a schedule-II controlled substance, as defined in section 18-18-204, C.R.S., unless the child tests positive for a schedule-II controlled substance as a result of the mother's lawful intake of such substance as prescribed.

- Tetrahydrocannibinol (THC) = Schedule I
  - Schedule I defined as no current accepted medical use and high potential for abuse. (CRS 18-18-203)

Immediately Postnatal

Recommendations from SEN Steering Committee:

- Medical
  - Clear plan for follow up care and transfer of information at time of discharge
- Infant: Complete info to pediatric provider
  - Follow up appointment within 48-72 hours
  - System for follow up if appointment is missed
  - Cared for in a Medical Home
  - Developmental screening and referrals
- Mother:
  - Medical and behavioral health, including postpartum depression screens

Immediately Postnatal

Recommendations from SEN Steering Committee:

- Child Welfare
  - Partner with families & service providers
  - Use standardized questions at time of referral
  - Assess other children in the home
- Criminal Justice, Behavioral Health, Human Services
  - Partner with families & service providers
- Education about AOD use while breastfeeding
- Educate and support caregivers, family, and all service providers
- Integrate services and eliminate barriers

Throughout Childhood

Recommendations from SEN Steering Committee:

- Educate, support and provide linkages for families of children with increased needs due to substance exposures
- Increase capacity for developmental assessments
- Work with public education system to understand impacts, communicate and collaborate to serve children and families

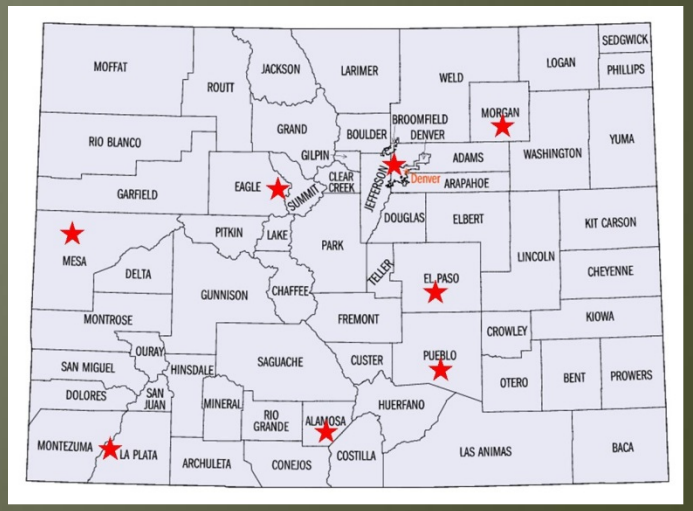
Throughout Childhood

Recommendations from SEN Steering Committee:

- Increase training for service providers to identify children throughout lifespan
- Provide prevention programming for these kids regarding risk of future AOD use
- Communicate across systems and integrate care strategies
- Support for the whole family in sustaining long term recovery

Moving Forward…

- 8 Regional Convenings
- Brought together local professionals in Medicine & Nursing, Public Health, Behavioral Health, Prevention, Family Support, Law Enforcement & Judicial, Community Education
- Developed Local Action Plans
- Identified Statewide Themes
- Disseminated Materials
- Next Steps…
  - Education
  - Policies/Prevention



References

- Office of Applied Studies. (2008). Results from the 2007 National Survey on Drug Use and Health: National findings (DHHS Publication No. SMA 08-4343, NSDUH Series H-34). Rockville, MD: Substance Abuse and Mental Health Services Administration. Also available online: http://oas.samhsa.gov.
- CASA Columbia. (2009). No Safe Haven: Children of Substance-Abusing Parents. Also available online: http://www.casacolumbia.org/addiction-research/reports/no-safe-haven-children-substance-abusing-parents.
- Pediatrics. 2009 Jul;124(1):285-93. doi: 10.1542/peds.2008-0576. Child protection outcomes for infants of substance-using mothers: a matched-cohort study. McGlade A1, Ware R, Crawford M.
- Pediatric Marijuana Exposures in a Medical Marijuana State; GS Wang, G Roosevelt, K Heard; JAMA Pediatrics, July 2013; 167;7;630-633
- SAMHSA, National Survey on Drug Use & Health, 2008, 2013
- Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (January 8, 2013). The NSDUH Report: State Estimates of Nonmedical Use of Prescription Pain Relievers. Rockville, MD.
- Technical Report: Prenatal Substance Abuse: Short- and Long-term Effects on the Exposed Fetus M Behnke, V C Smith, COMMITTEE ON SUBSTANCE ABUSE, and COMMITTEE ON FETUS AND NEWBORN, Pediatrics 2013; 131:3 e1009-e1024; published ahead of print February 25, 2013, doi:10.1542/peds.2012-3931
- www.ncsacw.samhsa.gov/files/Substance-Exposed-Infants.pdf - 539k - 2009-09-01
- Young, N. K., Gardner, S., Otero, C., Dennis, K., Chang, R., Earle, K., & Amatetti, S. Substance-Exposed Infants: State Responses to the Problem. HHS Pub. No. (SMA) 09-4369. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2009.

Not One More Child Coalition

El Paso County Commissioner Sallie Clark
4th Judicial District Attorney Dan May

Not One More Child

Since January 2012

- Started after 10 child fatalities due to abuse or neglect in El Paso County in 2011

- **Goal: to not see one more child die due to abuse or neglect in El Paso County**

2011 Fatalities

- Total = 10
- 6 younger than 1 year old
- 4 between 1 and 5 years old
- 7 Abusive Head Trauma
- 7 Military Families
  - 4 perpetrator Active Duty Military
  - 3 perpetrator Non-Active Duty Military

2012 Fatalities

- Total = 3
- 2 younger than 1 year old
- 1 between 1 and 5 years old
- 2 Abusive Head Trauma (1 born in EPC)
- 1 Military Family
  - 1 perpetrator Active Duty Military

2013 Fatalities

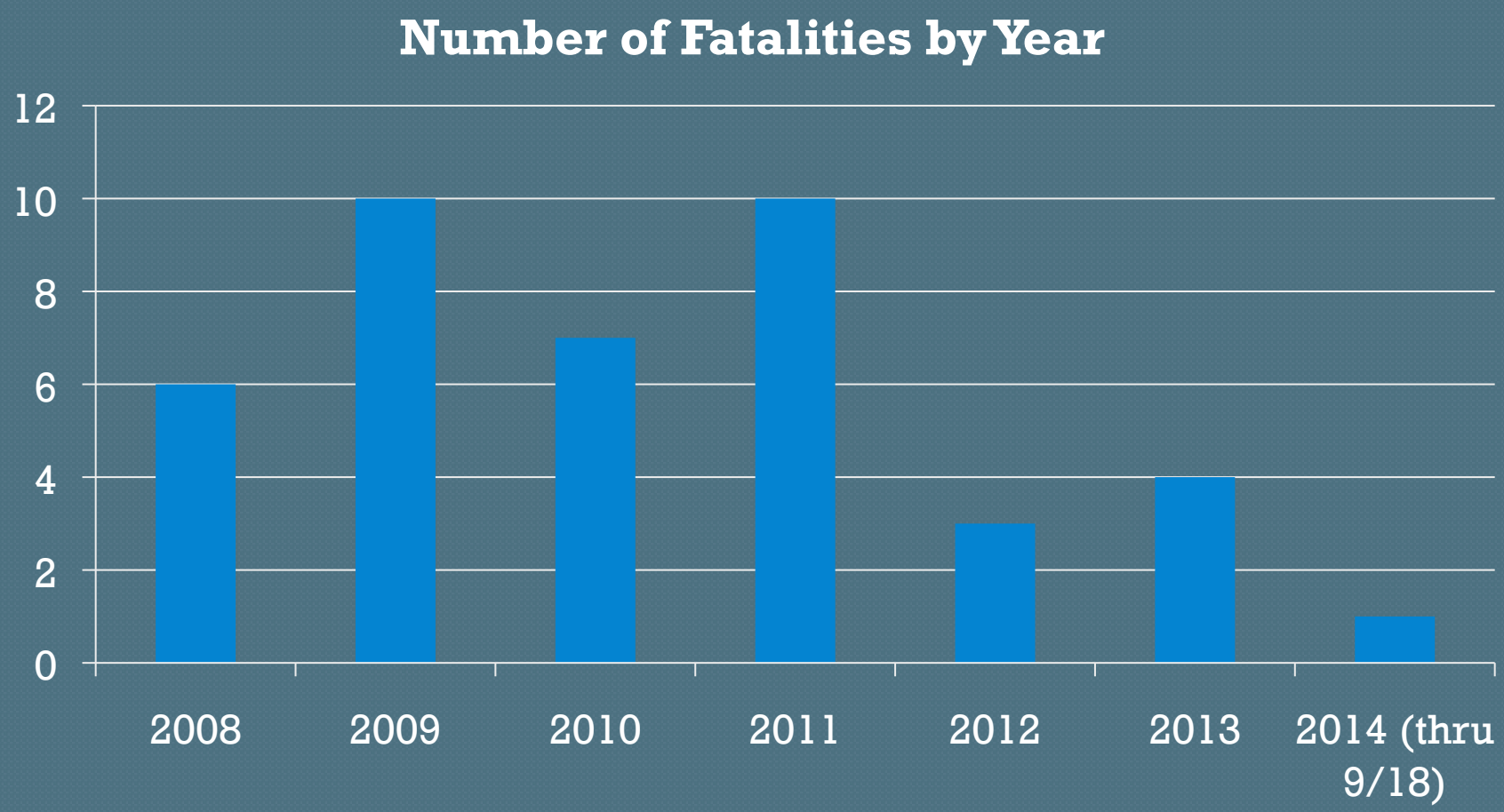
- Total = 4
- 1 younger than 1 year old
- 3 between 1 and 5 years old
- 0 Abusive Head Trauma
- 1 Military Family
  - Both parents found at fault

2014 Fatalities

(through Sept. 18)

- Total through Sept. 15 = 1
- 1 between 1 and 5 years old
- 1 Abusive Head Trauma (0 born in EPC)
- 0 Military Families

Fatalities Due to Child Abuse or Neglect in El Paso County



Group Make-up

More than 150 people have attended at least one of the meetings

- Department of Human Services
- DA's Office
- Law Enforcement
- Public Health
- Military
- Hospitals
- Non-Profits
- Media
- Emergency Services
- Faith Based Community

7 Task Groups

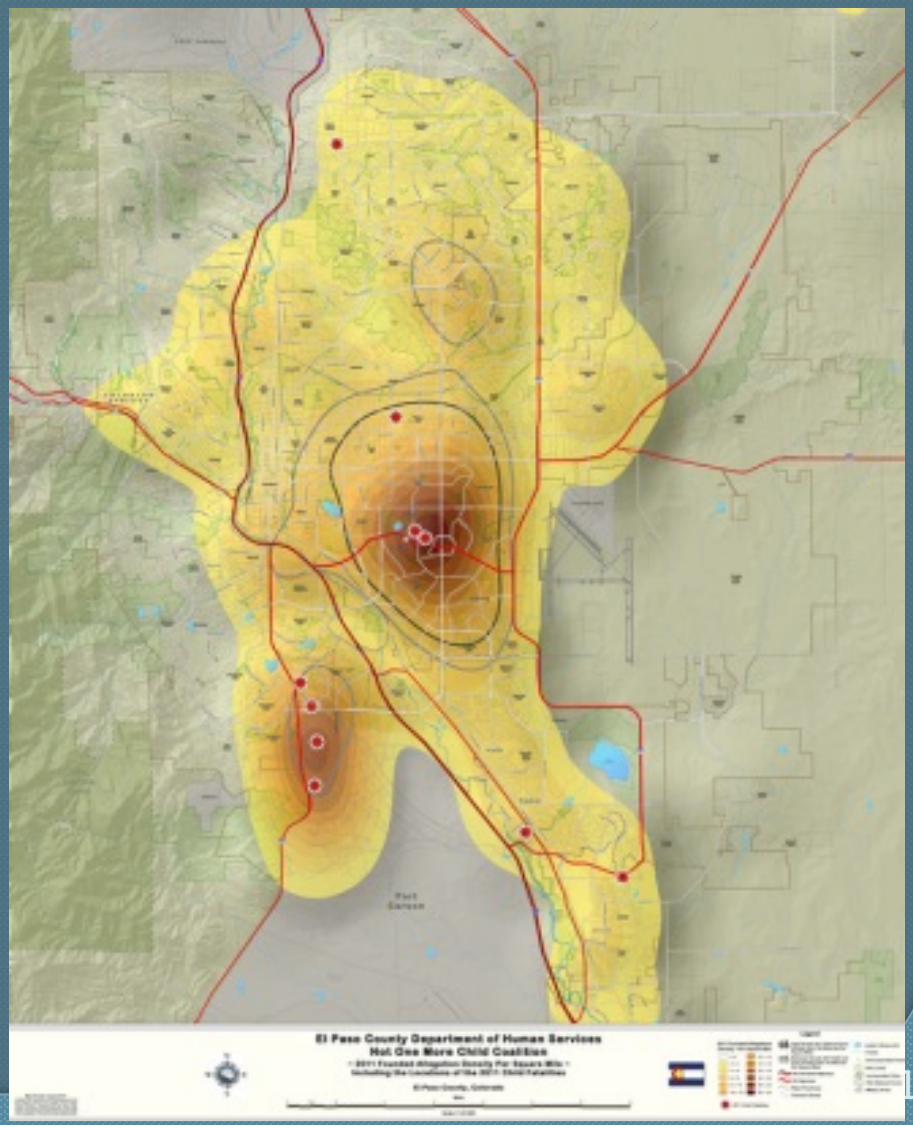
- **Communications**
- **Data**
- **Faith Based Community**
- **First Responders**
- **Hotline**
- **Medical Community**
- **Military**

Communications Task Group

- Created 30 minute positive parenting video to show in waiting rooms throughout the community
- Created public service announcements and negotiated for free air time on TV and radio
- Contribute monthly articles in Pikes Peak Parent Magazine
- Created Community Cards
- Not One More Child Website
- Generate positive media coverage

Data Task Group

- Developed maps that plot referrals, assessments, founded allegations and fatalities
- Developed El Paso County Child Maltreatment Indicators Summary with statistics from 2007 through 2011



Faith Based Task Group

- Through Hope and Home created the Kyndra's Hope Program creating awareness and providing prevention resources in the faith-based community

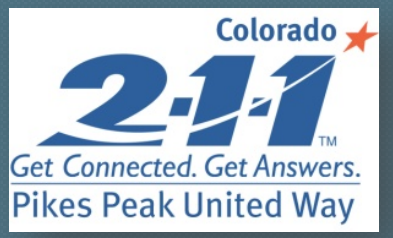
- Created the Kyndra's Hope Film
- Developed the Kyndra's Hope website

First Responders Task Group

- Created a three 15 minute videos on the Who, What, When, Where, Why and How of Child Abuse
- The presentation is also given live by committee members to various groups

Hotline Task Group

- Updates current resources for parents in local 2-1-1 database



- Identified 1-800-4-A-CHILD as an excellent resource with counselors available 24 hours a day 7 days a week

Medical Community Task Group

- All hospitals in El Paso County (Memorial, Penrose St. Francis and Evans Army Hospital) now have abusive head trauma education before parents leave with their new baby
- At Memorial Hospital in 2012 abusive head trauma rates were down 75% from pre-program rates
- Advanced education at Peak Vista Community Health Centers (serving low-income population)
- Developed magnets with tips for selecting a safe caregiver

Military Task Group

- Boot Camp for New Dads
- Boot Camp Train the Trainer
- Layette program
- Abusive Head Trauma presentations
- New Parent Support Program fully staffed
- Pregnancy PT (physical training) changes
- Increase in Parenting Programs
- Parenting support provided at Reintegration
- EXCELLENT COMMAND SUPPORT!!!!!

Recommendations

- All hospitals educating new parents on abusive head trauma
- All military installations offering education and support to new parents

Case Study: Interface between individual and population perspectives

Mom

- Late to prenatal care
- Did not complete high school
- Single Mother

Child

- Low birth weight, born at 32 weeks

Scenario 1: Everything turns out "reasonably" well

Mother

- Has a supportive mother
- Obtains employment
- Visit pediatrician regularly

Child

- Briefly receives and then graduates EI services
- School-ready by age 5
- Some decline in school performance at age 10

Scenario 2: Failure to thrive

Child

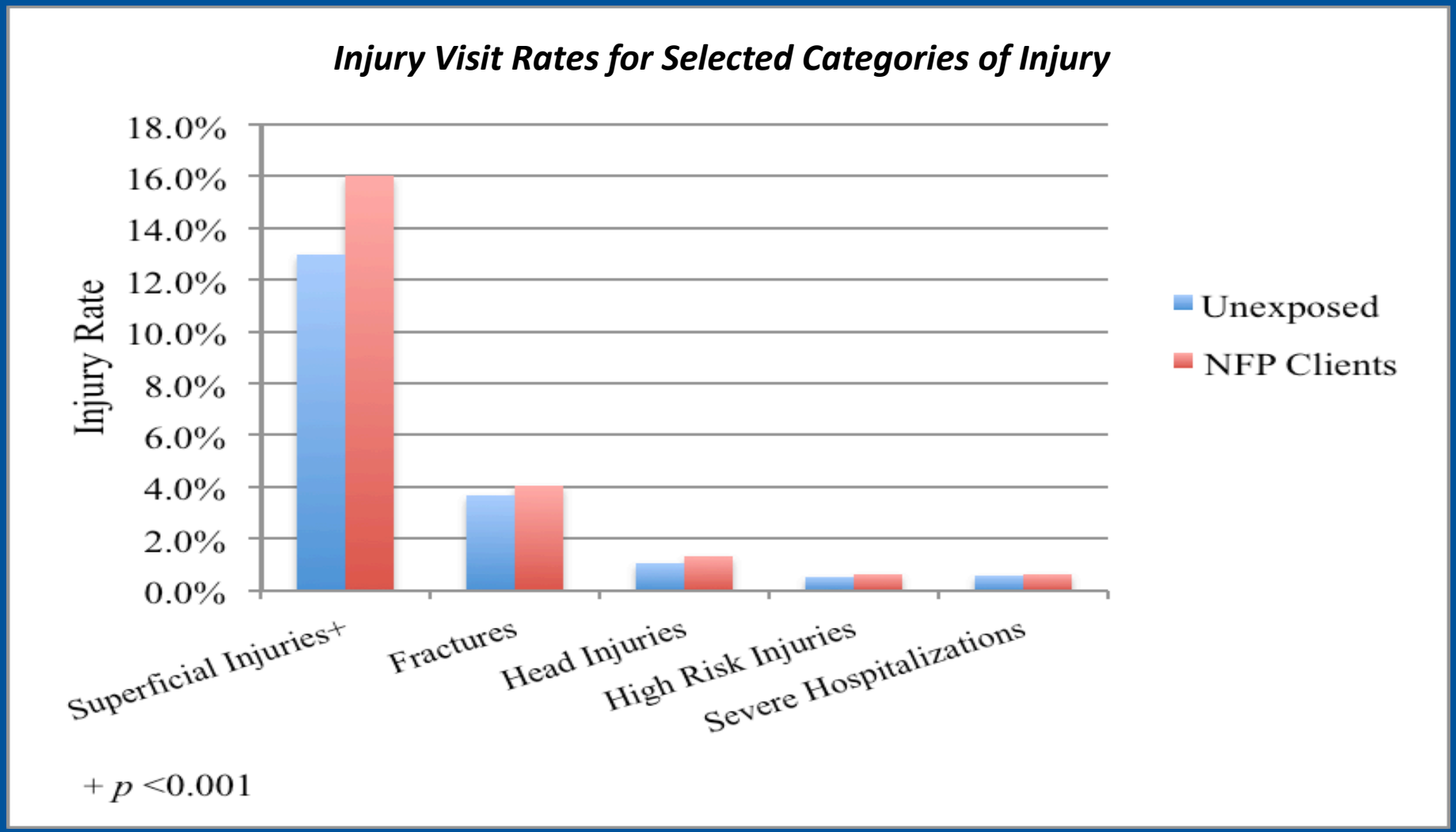
- Only three visits to pediatrician, last at 8 months
- Diagnosed with FTT at 8 month visit
- Dies at 2 ½ years, weighing 18 lbs

Scenario 3: Multiple injuries

Child

- Has 5 visits to different emergency rooms for injuries
- ED visits never reported to primary care office
- Had some no-shows to primary care, but minimal vaccine delay
- Dies at 18 months due to abusive head injury

Mothers enrolled in NFP had more injury visits for their children



Matone M, O'Reilly A, Luan X, Localio R, Rubin D. Emergency department visits and hospitalizations for injuries among infants and children following statewide implementation of a home visitation model. Maternal and Child Health Journal. Published online December 2, 2011.

Scenario 4: Family involved with multiple health and social service systems

Mother

- Enrolled in a home visitation program
- Re-entered a GED program
- Receiving WIC

Child

- Born to mother with history of substance abuse
- Admitted to ICU with shaken-baby syndrome at 9 months